YACHTING

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American Motor Boats in the Ostend Raid

Important Service has Been Renderedthe Allied Naval Forces by Costal Motor Craft from the Beginning of the War, and While Scout and Patrolling Duties Are Very Important Work, the Gasoline propelled Boats Have Engaged in More Strenuous and Hazardous Labors as the Thrilling Story of the Attack on the Hun's U-Boat at Ostend has Chronicled in a Spectacular Chapter of Naval History.

By S. M. R.

THE daring and cool courage of the men who volunteered for the second attack on the German submarine bases along the Flemish coast, has passed into history as a brilliant exploit which successfully accomplished its great objectives. To Commodore Hubert Lynes, C. M. G. should be accredited the planning and execution of this coupe and every man who took part in this spirited fight all true Americans will acclaim a hero. By their gallantry they not only made proud history for the Royal Naval Volunteer Reserve but set a standard of devotion for duty and efficiency which will stand for all time.

Incidentally this little arm of the Allied navy proved conclusively the value of yachting as a preparation for service at sea during time of war. There was scarcely an officer of the R. N. V. R. in the first raid on Zeebrugge or who participated in the second dramatic attack on the Mole who was not a yachtsman before the war. British yachtsmen helped man American built craft, for the motor boats which assisted the larger fighting ships in bottling up Ostend port were the 85-footers built by the Elco Company at Bayonne, N. J. Five hundred and fifty of these craft were built to government specifications in as many days and each boat was powered with two 220-H. P. Standard motors which maintain a speed of 18 miles an hour. But the achievement of the undertaking is best related by the chronicle of the event and a brief summary of the first raid is a fitting introduction for the second successful repetition

The first daring stroke failed to block the harbor and the Sirius lies in the surf some two thousand yards east of the entrance, which the old war ship gallantly failed to obstruct, and when in the early hours of morning the battle scarred Vindictive groped her way through the smoke screen and headed for the entrance it needed but little imagination to picture the old fighting ship awake and looking on. A costal motor boat—one of the M. L's. had visited her and hung a flare in her slack and rusty rigging, and that eye of unsteady fire, paling in the blaze of the star shells or reddening through the drift of the smoke, watched the whole great enterprise from the moment when it hung in doubt to its ultimate triumphant success.

Upon that occasion a combination of unforeseen and unforeseeable conditions had fought against the blockers. The main problem now was to secure the effect of a surprise attack upon an enemy who was clearly from his ascertained dispositions, expecting him. The Sirius and the Brilliant had been baffled by the displacement of the Stroom Bank buoy, which marks the channel to the harbor entrance, but since then aerial reconnaissance had established that the Germans had removed the buoy altogether and that there were now no guiding marks of any kind. They had also cut gaps in the piers as a precaution against a landing, and further when toward midnight on Thursday the ships moved from their anchorage it was known that some nine German destroyers were out and at large on the coast.

It was a night that promised well for the enterprise—nearly windless, and what little breeze stirred came from a point or so west of north; a sky of lead blue, faintly star dotted, and no moon; a still sea for the small craft, the motor launches and the costal motorboats, whose work is done close in shore.

From the destroyer which served the Commodore for flagship the remainder of the force was visible only as swift silhouettes of blackness, destroyers bulking like cruisers in the darkness, motor launches like destroyers, and coastal motorboats showing themselves as racing hillocks of foam. From Dunkirk a sudden and brief flurry of gunfire announced that German airplanes were about—they were actually on their way to visit Calais—and over the invisible coast of Flanders the summer lightning of the restless artillery rose and fell monotonously.

"There's the Vindictive!"

The muffled seamen and marines standing by the torpedo tubes and the guns turned at that name to gaze at the great black ship, seen mistily through the streaming smoke from the destroyer's funnels, plodding silently to her goal and her end. Photographs have made familiar that high side profile and the tall funnels with their Zeebrugge scars, always with a background of the pier at Dover against which she lay to be fitted for her last task. Now there was added to her the environment of the night and the sea and the greatness and tragedy of her mission.

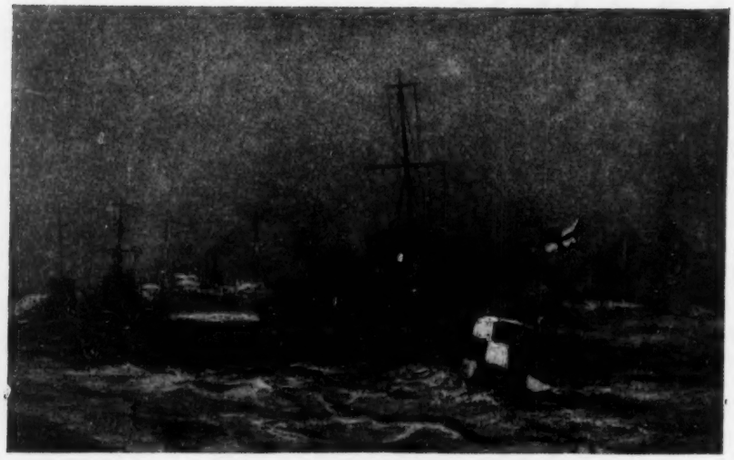
She receded into the night astern as the destroyer raced on to lay the light buoy that was to be her guide, and those on board saw her no more. She passed thence into the hands of the small craft, whose mission it was to guide her, light her and hide her in the clouds of the smoke screen.

There was no preliminary bombardment of the harbor and the batteries as before the previous attempt; that was to be the first element in the surprise. A time table had been laid for every stage of the operation and the staff work beforehand had even included precise orders for the laying of the smoke barrage with plans calculated for every direction of wind. The monitors, anchored in their firing position far to seaward, awaited their signal, the great siege batteries of the Royal Marine Artillery in Flanders, among the largest guns that have ever been placed on land mountings, stood by likewise to neutralize the big German artillery along the coast and the airmen who were to collaborate with an aerial bombardment of the town waited somewhere in the darkness overhead. The destroyers patroled to seaward of the small craft.

The Vindictive, always at that solemn gait of hers, found the flagship's light buoy and bore up for where a coastal motor boat, commanded by Lieut. Slayter, R. N., was waiting by a calcium flare upon the old position of the Stroom Bank buoy. Four minutes before she arrived there and fifteen minutes only before she was due at the harbor mouth, the signal for the guns to open was given.

Two motor boats under Lieut. Reid, R. N. R., and Lieut. Poland, R. N., dashed in toward the ends of the high wooden piers and torpedoed them. There was a machine gun on the end of the western pier and that vanished in the roar and the leap of flame and debris which called to the guns. Over the town a flame suddenly appeared high in air and sank slowly earthwards, the signal that the airplanes had seen and understood, and almost coincident with their first bombs came the first shells whooping up from the monitors at sea. The surprise part of the attack was sprung. The surprise, despite the Germans' watchfulness, seems to have been complete.

Up to the moment when the torpedoes



WE LEFT BEHIND THE PAINTED BUOY THAT TOSSES AT THE HARBOUR-MOUTH.

FROM A PAINTING BY LIEUT. DONALD MAXWELL

of the motor boats exploded there had not been a shot from the land—only occasional routine star shells. The motor launches were doing their work magnificently. These pocket warships, manned by officers and men of the Royal Naval Volunteer Reserve, are specialists at smoke production. They built to either hand of the Vindictive's course the likeness of a dense sea mist driving landward with the wind. The star shells paled and were lost as they sank in it; the beams of the searchlights seemed to break off short upon its front. It blinded the observers of the great batteries, when suddenly, upon the warning of the explosions, the guns roared into action.

There was a while of tremendous uproar. The coast about Ostend is ponderously equipped with batteries, each with its name known and identified—Tirpitz, Hindenburg, Deutschland, Cecilia and the rest. They register from six inches up to monsters of fifteen-inch naval pieces in land turrets, and the Royal Marine Artillery fights a war long duel with them. These now opened fire into the smoke and over it at the monitors. The marines and the monitors replied. Meanwhile the airplanes were bombing methodically and the anti-aircraft guns were searching the skies for them. Star shells spouted up and floated down, lighting the smoke banks with spreading green fires, and these strings of luminous green balls, which airmen call "flaming onions," soared up to lose themselves in the clouds. Through all this stridency and blaze of conflict the old Vindictive, still unhurrying, was walking the lighted waters toward the entrance.

It was then that those on the destroyers became aware that what had seemed to be merely smoke was wet and cold, that the rigging was beginning to drip, that there were no longer any stars—a sea fog had come on.

The destroyers had to turn on their lights and use their sirens to keep in touch with each other. The air attack was suspended and the Vindictive, with some distance yet to go, found herself in gross darkness.

There were motor boats to either side of her, escorting her to the entrance, and these were supplied with what are called Dover flares—enormous lights capable of illuminating square miles of sea at once. A Very pistol was fired as a signal to light these, but the fog and the smoke together were too dense for even the flares. The Vindictive put her helm over and started to cruise to find the entrance. Twice in her wanderings she must have passed across it and at her third turn, upon reaching the position at which she had first lost her way, there came a rift in the mist and she saw the entrance clear, the piers to either side and the opening dead ahead.

The inevitable motor boat dashed up (No. 22, commanded by acting Lieut. Guy L. Cockburn, R. N.), raced on into the opening under a heavy and momentarily growing fire, and planted a flare on the water between the piers. The Vindictive steamed over it and on. She was in.

The guns found her at once. She was hit every few seconds after she entered, her scarred hull broken afresh in a score of places and her decks and upper works swept.

The machine gun on the end of the western pier had been put out of action by the motor boat's torpedo, but from other machine guns at the inshore ends of the pier, from a position on the front and from machine guns apparently firing over the eastern pier, there converged upon her a hail of lead. The after control was demolished by a shell which killed all its occupants, including Sub-Lieut. MacLachlan, who was in command of it. Upper and lower bridges and chart room were swept by bullets, and Commander Godsal, R. N., ordered his officers to go with him to the conning tower.

There they observed that the eastern pier was breached some 200 yards from its seaward end, as though at some time a ship had been in collision with it. They saw the front of the town silhouetted again and again in the light of the guns that blazed at them; the night was a patchwork of fire and darkness.

Immediately after passing the breach in the pier Commander Godsal left the conning tower and went out on deck, the better to watch the ship's movements. He chose his position and called in through the slit of the conning tower his order to starboard the helm. The Vindictive responded. She laid her battered nose to the eastern pier and prepared to swing her 320 feet of length across the channel.

It was at that moment that a shell from the shore batteries struck the conning tower. Lieut. Sir John Alleyne and Lieut. V. A. C. Crutchley, R. N., were still within. Commander Godsal was close to the tower outside. Lieut. Alleyne was stunned by the shock. Lieut. Crutchley shouted through the slit to the Commander, and receiving no answer rang the port engine full speed astern to help in swinging the ship.

By this time she was lying at an angle of about 40 degrees to the pier and seemed to be hard and fast, so it was impossible to bring her further round. After working the engines for some minutes to no effect Lieut. Crutchley gave the order to clear the engine room and abandon ship, according to the programme previously laid down.

Engineer Lieutenant Commander Bury, who was the last to leave the engine room, blew the main charges by the switch installed aft. Lieut. Crutchley blew the auxiliary charges in the forward six-inch magazine from the conning tower. Those on board felt the old ship shrug as the explosive tore the bottom plates and the bulkheads from her. She sank about six feet and lay upon the bottom of the channel. Her work was done.

It is to be presumed that Commander Godsal was killed by the shell which struck the conning tower.

Lieut. Crutchley, searching the ship before he left her, failed to find his body or that of Sub-Lieut. MacLachlan in that wilderness of splintered wood and shattered steel.

In the previous attempt to block the port Commander Godsal had commanded the Brilliant, and together with all the officers of that ship and of the Sirius had volunteered at once for a further operation. Engineer Lieutenant-Commander Bury, who was severely wounded, had been in the Vindictive in her attack on the Zeebrugge Mole.

He had urged upon the Vice-Admiral his claim to remain with her, with four engine room artificers, in view of his and their special knowledge of her engines.

The names of these four are H. Cavanagh, H. M. S. Vindictive, wounded; N. Carroll, Royal Naval Barracks, Chatham, wounded; A. Thomas, H. M. S. Lion, missing; N. Harris, H. M. S. Royal Sovereign.

The Coxswain was First Class Petty Officer J. J. Reed, Royal Naval Barracks, Chatham, who had been with Commander Godsal in the Brilliant and whose urgent request to be allowed to remain with him had been granted. The remainder of the crew were selected from a large number of volunteers from the ships of the Dover patrol.

Most of the casualties were incurred while

the ship was being abandoned. The men behaved with just that cheery discipline and courage which distinguished them in the Zeebrugge raid. Petty Officer Reed found Lieut. Alleyne in the conning tower, still unconscious, and carried him aft under a storm of fire from the machine guns. Lieut. Alleyne was badly hit before he could be got over the side and fell into the water. Here he managed to catch hold of a boat fall, and a motor launch under Lieut. Bourke, R. N. V. R., succeeded in rescuing him and two other wounded men.

The remainder of the crew were taken off by Motor Launch 254, under Lieut. Drummond, R. N. V. R., under a fierce fire. When finally he reached the Warwick the launch was practically in a sinking condition. Her bows were shot to pieces. Lieut. Drummond was himself severely wounded. His second in command, Lieut. Ross, R. N. V. R., and one hand were killed. A number of others were wounded. The launch was found to be too damaged to tow and day was breaking.

She and the Warwick were in easy range of the forts, so as soon as her crew and the Vindictive's survivors were transferred a demolition charge was placed in her engine room and she was sunk.

Always according to programme, the recall rockets for the small craft were fired from the flagship at 2:30 a. m. The great red rockets whizzed up to lose themselves in the fog. They cannot have been visible half a mile away, but the work was done and one by one the launches and motorboats commenced to appear from the fog, stopped their engines alongside the destroyers and exchanged news with them.

There were wounded men to be transferred and dead men to be reported, their names called briefly across the water from the little swaying deck to the crowded rail above. But no one had seen a single enemy craft. The nine German destroyers who were out and free to fight had chosen the discreeter part.

Vice-Admiral Sir Roger Keyes was present at the operation in the destroyer Warwick, Commander Hamilton Benn, R. N. V. R., D. S. O., M. P., was in command of the motor launches and Lieut. Francis C. Harrison, D. S. O., R. N., of the coastal motorboats. The central smoke screen was entrusted to Sub-Lieut. Humphrey V. Low, R. N., and Sub-Lieut. Leslie R. Blake, R. N. R.

Casualties as at present reported stand at two officers killed and six men; two officers and ten men, all of the Vindictive, missing, believed killed, and four officers and eight men wounded.

It is not claimed by the officers who carried out the operation that Ostend harbor is completely blocked, but its purpose, to embarrass the enemy and make the harbor impracticable to any but small craft and dredging operations difficult, has been fully accomplished.

Photographs just taken from airplanes show that the entrance to the harbor is rapidly silting up, and that accordingly the British effort to close the channel is being reinforced by nature.

The Junior Naval Reserve and Its Activities

AFTER a two weeks' journey, mostly by water from West Palm Beach, Fla., 100 Junior Naval Reserves arrived here by train from Philadelphia on May 28, on their way to Camp Dewey, the summer training base near New London, Conn.

In Philadelphia, three cadets, Andrew Capps, Joseph Dawson and Andrew Coombs enlisted in the merchant marine with the Merchants and Miners Transportation Company for service on the steamship Creton.

After a successful winter season at Camp Daniels, where Commandant Willis J. Physioc and assistants trained 300 boys for the navy and merchant marine, they broke camp two weeks ago and started north in small boats towed by motor boats by the inland route and camping on shore at night. The cadets carried their own cooks and supplies, and their band enlivened the evenings on shore and attracted crowds of natives every night. At one lumber camp the workmen were so delighted at the sudden appearance of the naval pageant that all hands were invited ashore and a banquet was prepared for the young sailors. Arriving at St. Augustine, the cadets were entertained for one day by the local training post of the Junior Naval Reserve. Some of the cadets left the expedition here and went to their homes, and two boats were left with the local post for training purposes during the summer. The next leg of the long journey to Jacksonville was made through a canal, and it took five days. Arriving in Jacksonville, the cadets were royally entertained by the local post and paraded through the principal streets.

At Jacksonville three cadets left the Juniors and enlisted in the regular naval service, while another boy took a train for New Orleans to enlist in the engineer corps. While in Jacksonville Commandant Physioc granted a furlough to about 50 cadets who had earned their vacations by hard study, drills, and general nautical knowledge The other cadets boarded the steamship Creton bound for Philadelphia, and on this trip the cadets got some first-hand training they will never forget. The captain was so well pleased with the work of the boys that he confessed that the cadets "practically ran the ship from Jacksonville to Philadelphia."

In Philadelphia, Major Physioc took the cadets on sight-seeing "hikes" to points of interest, and then the cadets boarded a train for this city, where they arrived, tired but happy. After a day's rest in New York they took a Norwich line steamer on the last leg of the long journey to Camp Dewey. Several other local boys went to the big naval training camp to help prepare for the official opening on June 15th, when cadets will begin to arrive from all parts of the country.

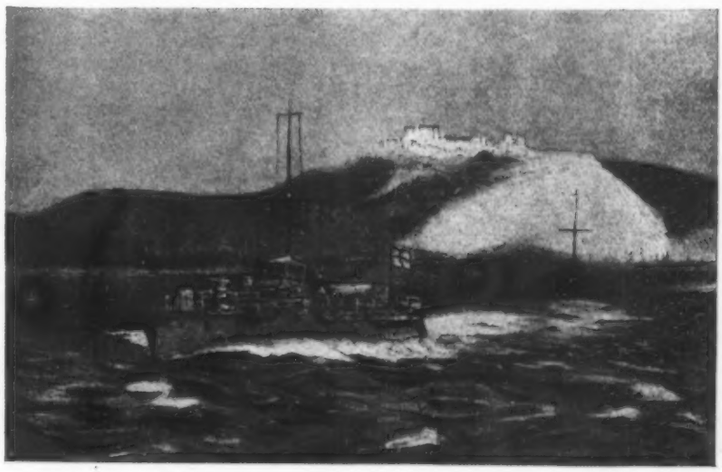
Among the new members of the Advisory Board of the Junior Naval Reserve are Charles M. Schwab, Edward N. Hurley, and Henry Howard, all of whom are assisting the Government in building our new merchant marine and for which the Junior Naval Reserve has now in training over 9,000 boys under the enlistment age. The national headquarters are at 218 West Fifty-eighth Street, New York

Plans are rapidly maturing for taking Junior Naval Reserves on yachts for practise cruises in Long Island Sound and around New York this summer, and the committee of patriotic yacht owners in charge report that already about thirty owners of sailing and other craft have come forward and volunteered to ship from five to thirty cadets on every trip.

Mr. Charles W. Leavitt, of 220 Broadway, secretary and treasurer of the American Yacht Club of Rye, was the first to entertain the idea of giving Junior Naval Reserves practical sea-training on yachts this summer, and he called a meeting which was attended by about twenty-five prominent yachtsmen,

(Continued on page 29)

HOW FRESH WAS EVERY SIGHT AND SOUND
ON OPEN MAIN ON WINDING SHORE!
WE KNEW THE MERRY WORLD WAS ROUND
AND WE MIGHT SAIL FOR EVERMORE.



FROM A PAINTING BY LIEUT. DONALD MAXWELL

The Motor-boat's Tender

To Select a Tender Which Will Fulfill the Requirements of a Stable and Light Boat That Can Be Easily Handled, the Chief Points Here Set Forth Will Assist the Yachtsmen to Make a Satisfactory Choice

By STILLMAN TAYLOR

IN THE CLINKER-BUILT TYPE OF ROWING TENDER THERE ARE MANY GOOD FEATURES AND THE LAP-STREAK FORM OF CONSTRUCTION MAKES A VERY DEPENDABLE CRAFT AND ONE THAT CAN BE FASHIONED FROM LIGHTER PLANKING THAN IS USUALLY USED IN THE SMOOTH SKI OR CARVEL BUILT BOAT.

THE tender or dinkey boat is the inseparable companion of every motorboat, or at least it should form a part of the craft's findings, though many boatmen whose nautical pleasures are taken in small packages, so to speak, are not over fastidious in this respect. In very small craft a tender is admittedly more or less of a nuisance, and when off for a few hours run can be omitted without inconvenience. But in those craft making any pretension to cruisers, a well built, sea-worthy and nicely finished tender towing astern or snugly housed on the cradle, is a convenience that no motor boatman can really afford to get along without. As no salt-water boatman of any experience at all, would think of putting to sea without first looking over his ground tackle, so you may be sure the old boatman will be as likely to leave his best mud hook on the dock, as to begin a voyage of even short duration, without some kind of a dinkey following the white rippling water of his wake. The ever present salutation "tender ahoy!" bespeaks the lubberly boatman, which every true blue yachtsman will do well to avoid, for while our clan of the sea are ever glad to lend a helping hand where needed, there is such a thing as straining fraternal relations, as many a boatman who has been oft and inconveniently "stung" can attest.

In the matter of a tender for your ship, every boatman may be said to have his own particular notions of what a row-a-boat consists and judging by the numerous samples the writer has happened across, the model differs almost as much as the color of the paint. Indeed there are tenders and tenders, and many coming under the one general caption could with more propriety be classed as lobster boxes, so far as seaworthiness is concerned, and it is this one point that every owner and skipper should well consider. The uses of a tender are various and the dinky should not only be selected as a handy means of getting about to and from ship, but also from the standpoint of safety should the occasion arise when it is imperative for all hands and the cook to leave their berths and take their chances in the endeavor to reach the nearest shore. In point of fact the tender should be small and light enough to handle easily, but it must be also adequate to carry the entire crew and staunch enough to stand a reasonable bit of rough white water.

In selecting the motorboat's tender there are just three classes of dinkeys available for the average yachtsman who possesses small and modest craft. Those yachtsmen who own large and elaborate cruisers with paid hands aboard, are naturally outside the pale of this article, which is written for the owner who is his own skipper, engineer and often enough his own crew as well. The choice of a tender then, both as to model and size, depends upon the length of the motor boat and also to some extent upon the class of boating mostly indulged in. The flat bottom skiff or sharpie, the round bottom dinkey fitted with oars, and the motor propelled tender are all good utility boats. Suppose we consider each detail of the different crafts. The flat bottom sharpie as generally seen alongside inexpensive motor boats, are not very good examples of designing or workmanship. The average "flat footed" tender is too long, too narrow in the beam, and much too low sided for anything but the regulation "white-ash breeze"; And again the majority of boats in this class are made with an exaggerated rocker bottom, and if there is one useless thing in a boat tender it is this same rocking keel, which not only makes the boat settle down at the stern and makes rowing doubly hard, but likewise aggravates the tendency to pound and slap in even a light seaway. These defects of model are not present in a well designed and properly made sharpie tender, and no boatman will be satisfied with anything else.

Although a flat bottom tender is undeniably inferior in carrying capacity and seaworthiness to a well built round bottom dinkey, yet the light draught of the sharpie is often a very great convenience, especially where boating is largely confined to lakes and rivers where rough water is the exception. The flat bottom construction without skeg makes a light weight tender which may be hauled out on the bank or sandy beach, and moreover this type of boat is quite inexpensive, costing about half the price asked for a round bottom boat of equal high grade. The writer has seen a few of these boats equipped with light motors, but owing to the shallow flat floor, boats of this class are less suited for motive power and more completely meet requirements when used as rowing boats. For a flat bottom tender, nine feet is the most useful length, and a beam of three feet eight inches, gives good stability and carrying capacity and neat graceful lines. The sides are best made with moderate flare and with a double strake to secure additional strength. The single side board is prone to check and crack under the strain of ordinary wear and tear. A deep transom reaching down to the water line should be specified, and the flooring should be laid across and not planked lengthwise as is the custom with some builders. The stem should be of selected oak, not set plumb, but racked from gunnel to forefoot. Risings should be provided, as well as three athwartship seats and a slatted flooring fitted with foot brace for the rower. In finishing up a tender of this kind, many yachtsmen paint the inside and finish up the exterior with spar varnish, but a more durable and to my mind, equally attractive finish is to paint the lower strake and finish the top ribbon in spar varnish. A three-quarter inch rope extending from each side of the transom completely around the fenderwale affords better protection to the motor boat's paint than the small cork filled fenders which are forever becoming detached or lost overboard.

The round bottom flush planked dinkey is the ideal all-around tender, and if of generous beam a boat of this model will carry a surprisingly heavy load, and prove a good safe boat in quite a heavy seaway.

FOR MANY USES THE FLAT BOTTOM DINGHY IS A PARTICULARLY GOOD CHOICE. ALTHOUGH NOT EQUAL TO THE ROUND BOTTOM IN CARRYING CAPACITY AND SOMEWHAT LESS SEAWORTHY, THE FLAT FLOOR CRAFT IS HOWEVER OFTEN A BIG ADVANTAGE, ESPECIALLY WHEN THE TENDER IS MUCH USED IN SHALLOW WATERS AND OFTEN PULLED UP ON BANK OR BEACH

So far as appearance is concerned (and a good looking tender adds much to the smartness of the motor craft), the smooth skin and graceful curves of a well designed dinkey makes a "classy" dinkey which the owner may be proud to possess. For the smaller and average cruiser it is a mistake to buy a large heavy tender, and for craft running from thirty to sixty feet, a nine foot dinkey is in many ways the better choice. A light weight dinkey 9 feet long, 4 feet beam with good freeboard, and fairly straight as to top sheer makes a nice appearing and dry boat. A tender of this kind will probably cost in the neighborhood of fifty dollars if purchased of a high class builder, but as these small craft are comparatively easy for the amateur to build, a considerable saving may be affected by the boatman who is handy with common tools. The writer has, in fact, built three of these little tenders, and sold them after a season's use at a good profit. This tender is practically what the ship carpenter calls a "seven-eight" boat; that is, the thickness of keel, knees, skeg, stern post, transom, breast hook, gunwales and fender wales are 7/8" stock. Tenders are built in three different ways; either planked carvel or smooth skin with 3/8", double planked with 1/8" or planked with 1/4" lap-streak, or covered with canvas. The lap-strake or "clinker built" construction makes a strong boat and the ship lap enables the builder to use lighter planking than where the carvel method is used, as in this latter construction, the seams are generally caulked. The canvas covered tender is growing popular, being light and always water-tight, with no seams to open no matter how long the tender lies in her cradle or hangs on the davits. The canvas is smoothly cemented to the planking with marine glue, and if it is then well filled and painted and given a couple of coats of good spar varnish it will form a glossy, smooth durable and very attractive finish. A motor may be easily installed in this type of tender, but its weight should not exceed seventy-five pounds.

The power tender, that is the dinkey especially designed for motor power, is a convenience which few yachts of the larger classes are without. For a sixty-five or seventy-footer, a tender of 12 feet length, and 3 feet 10 inches beam is about right. If of the smooth skin construction 5/8 inch planking should be used, but if it is to swing at the davits, it is best planked with 1/4-inch white cedar and covered with canvas. The motor should be of light weight and with 2 H. P. a twelve-foot tender will give a speed of seven to eight miles per hour. To be sure one sees a great variety of dinkeys on the various types of motor yachts, many comparatively small craft carrying heavy cumbersome tenders, while large speed cruisers are frequently equipped with light cockleshell boats. The boatman should avoid these extremes when selecting his tender that he may pick out a light weight yet stable boat.

If the boatman decides to build a tender himself, he will probably find it less troublesome and expensive to purchase a knock-down frame and patterns. As several reputable firms are now making a specialty of furnishing frames and patterns, the boatman is pretty sure to find just the model and size of tender he desires. The patterns are drawn to full size, and are accompanied with detailed instructions, so that it is but necessary to saw and plane the lumber to the shape of the tracings. In every harbor you will find quite a fleet of these amateur-built craft, and if the work has been carefully done they will pass muster in any company and compare very favorably indeed with the output of the professional builder.

In finishing a wood planked boat of either carvel or clinker construction, the inside is generally painted with a couple of coats of some light tinted paint, while the exterior is finished in outside spar varnish. Paint is of course more durable and less bothersome to keep in good shape, but the attractiveness of a natural finish is difficult to resist. When you run across a well modeled and nicely painted tender you may be sure its owner is an old salt, who has passed through the polished brass and spar varnish stage to finally choose a painted surface as less laborious to keep up.

In the larger boats the tender is swung at the davits or cradled on the deck, but in small craft with limited deck space the dinkey is only taken aboard when necessary. But in a towing tender there is of course always a little drag and while this pull did severely impede progress in the old sailing days, it is of little moment in the motor-driven cruiser. In towing the tender astern, especially when the motorboat is running before a high sea, the erratic behaviour of the dinkey is frequently a source of worry to the skipper, as it rushes down upon an in-coming wave and threatens to overtake the ship and come to grief against the counter, or mayhap yaw out of your wake and narrowly escape turning turtle. To steady the tender some boatmen run out a long painter and let the dinkey trail far astern, and while this gives more sea room, it also increases the risk, for if the tender does sweep down upon the ship, there is certain to be a bad smash up. Accordingly in a high seaway, the writer prefers to use the safer method of the "down easter," by towing the tender with two short painters leading to the port and starboard quarter of the ship, and lash a fifty-pound weight or sand-bag to the floor close up to the dinkey's stern. The short painters will keep the nose of the tender from running under, while the weight in the stern steadies her and effectually prevents yawing about. When towing in this fashion it is seldom indeed that a sea will fill the dinkey, but no concern need be felt if it does, since almost all the water will run out over the stern as she climbs the crest of a following sea.

But it is not always while towing that the tender behaves like a kittenish colt. In fact when lying at anchor with the dinkey afloat it often happens that the wind and tide "back up" and the tender is now caught by the tide and again by the wind, to wander

(Continued on page 36)

THE MODIFIED SKIFF IS A VERY USEFUL AND POPULAR TYPE OF SMALL BOAT. CONSTRUCTED WITH ROUNDED BILGE AND WITH THE NARROW AND FLAT DORY BOTTOM, IT COMBINES THE GOOD APPEARANCE OF THE ROUND BOTTOM WITH THE SHOAL DRAUGHT FEATURES OF THE FLAT BOTTOM SHARPIE AND DORY TYPES

THE EMPEROR'S CUP

By WILLIAM ATKIN
With Drawings by
CHARLES HUGHES

I

THOSE WONDERFUL GERMAN SPORTSMEN! KEEN TO BE SURE, EFFICIENT, LIGHT-HEARTED AND OVER-BRIMMING WITH A NATIVE GENEROSITY THAT MARKS THEM ALL GENTLEMEN. 'TIS TRUE, THEY ARE A SUPERIOR RACE—HOW ELSE MIGHT THEY ACHIEVE THE THINGS THEY HAVE *achieven?*

THE KAISER, KINDLY BLUFF SOUL, INTERESTS HIMSELF IN EVERYTHING FROM THE HARD WORKING GERMAN BREWERY LABORER AND HIS PROBLEMS TO THE AMERICAN YACHTSMAN AND HIS YACHTS—LOVES THEM, TOO, AND EQUALLY WELL.

IT IS SAID THAT WILHELM IN THE MIDST OF A GREAT BATTLE WITH DANGER BESETTING UPON EVERY SIDE FOUND TIME TO STEP ASIDE AND PLUCK A VIOLET; THAT HE CARESSED IT; SIGHED THAT THE ENGLISH HAD SO RUN AMUCK, AND AS HE SOLILOQUIZED SAW A SANER, MORE JOYFUL WORLD, A FRIENDLIER, KINDLIER WORLD. SO HIS SOUL UPLIFTED AND HE WAS GLAD—GLAD FOR THE PART HE, AS THE HEAD OF A WONDER NATION, HAD ALWAYS HAD IN CEMENTING THE AFFECTIONS OF ONE NATION FOR ANOTHER.

IT WAS IN THIS SPIRIT, A DECADE OR SO AGO, THAT WILHELM OFFERED A SUPERLATIVE TROPHY—THE EMPEROR'S CUP—AS A PRIZE TO THE YACHTSMAN WHOSE CRAFT SHOULD FIRST PASS THE FINISH LINE AFTER A RACE ACROSS THE BROAD ATLANTIC.

II

AND AN AMERICAN CRAFT WON, ATLANTIC! AMERICA WAS DOUBLY FRIENDLY WITH THE GERMANS, FINE PEOPLE, GOOD SPORTS, AND SOME WHISPERED THAT 'TWAS A PITY HAMBURG, THE GERMAN ENTRY, MIGHT NOT HAVE WON, THOUGH SHE WAS SECOND. 'TWOULD HAVE BEEN SO ENCOURAGING TO THE MODEST EFFORTS OF THE, ER—THE HUNS IN THIS THE FIRST ACROSS-THE-ATLANTIC RACE A CRAFT OF THEIRS HAD EVER ENTERED. BUT NO ONE WEPT. THE GERMAN NEWSPAPERS SAID LOVELY THINGS ABOUT AMERICAN AND ENGLISH SPORTSMANSHIP WHILE ENGLAND AND AMERICA WAXED ELOQUENT OVER THINGS GERMAN—INDEED THOSE WERE HAPPY DAYS—GOOD FELLOWSHIP JUST OOZED, THE DRINKS PASSED ROUND, AND UNDERSTANDING BLOOMED FOR ALL.

FRIENDSHIP! GOOD GERMANS, FRIENDSHIP FOR THE WORLD. GENUINE GERMAN FRIENDSHIP. LOVELY.

III

JUST TO SPOIL IT ALL THOSE ENGLISH FOLKS STARTED ON A RAMPAGE. THOSE ENGLISH ARE A DECADENT RACE. THEY DRINK HARD AND IN A DRUNKEN FIT SOUGHT TO CONQUER BELGIUM AND NORTHERN FRANCE. SOUGHT TO CONQUER! THINK OF IT! BUT THE GERMAN SWORD IS KEEN AND THOSE PEOPLES SHALL BE SAVED. SAVED DESPITE AMERICA—AMERICA, WHERE MONEY IS ALL; AMERICA WHERE THEY AUCTIONED OFF THE EMPEROR'S CUP FOR THE BENEFIT OF THE RED CROSS; THAT BEAUTIFUL CUP! AND IT BROUGHT $125,000.00; A GRAND CUP, GOLDEN, AND SO BEAUTIFUL.

IV

GRATITUDE? AN AMERICAN KNOWS NOTHING OF THAT—THEY PAY $125,000.00 FOR A GOLDEN CUP; THEY PROVE ITS VALUE—THEN WHAT DO THEY DO? SLANDER ITS DONOR, SLANDER THE KAISER! HOW COULD IT BE ANYTHING BUT GOLD? WOULD AN AMERICAN PAY $125,000.00 FOR A PEWTER GILDED THING? IT IS GOLD, YET THOSE SELF STYLED SPORTSMEN ACCUSE THE GERMAN EMPEROR OF FOISTING UPON THEM A LEADEN THING AS GOLDEN. CAN ANY ONE IMAGINE THE INNER WORKINGS OF THE AMERICAN MIND? IT'S INCOMPREHENSIBLE!

V

THE SONDER CUPS TOO! GOTT-IN-HIMMEL, WHAT IS THIS WORLD COMING TO? WARS AND FAMINES, DOUBTERS OF THE GERMAN EMPEROR'S AMBITIONS AND ACTIONS—DOUBTERS OF THE SUPER-MAN WHO WAS CREATED ALONE BY GOTT TO BRING PEACE ON EARTH AND GOOD WILL TO MEN, EVEN BY THE SWORD IF NEED BE. BUT THE GERMANS BY NATURE HATE THE SWORD—IT IS KINDLIER TO USE SUBTLER METHODS, GENTLER, CLEANER, UPRIGHTER—MORE GERMAN—THAT'S THE PHRASE—MORE GERMAN!

MORE GERMAN, AH, HOW MUCH THAT MEANS! TO A GERMAN THE QUINTESSENCE OF NATIONAL GLORIOUSNESS—TO A HUMAN BEING, AMERICAN PERHAPS, ROTTENNESS, ROTTENNESS BLOSSOMING IN A PEOPLE WHO RAPE ITS ENEMIES' WOMEN KIND, VIOLATE PRIESTS, DESECRATE TEMPLES AND HAND OVER A GLITTERING CUP FOR FRIENDSHIPS' HAND CLASP THAT PURPORTS TO BE OF GOLD BUT ISN'T. OF SUCH STUFF ARE SUPER-MEN MADE!

Life in an Eastern Port

By NORMAN KERR

THE WHARVES OF HONG KONG HARBOR ARE LINED WITH MERCHANT VESSELS FLYING THE FLAGS OF EVERY MARITIME NATION. THESE WITH A MEDLEY OF SAMPANS, JUNKS AND GRIM WAR CRAFT LYING AT ANCHOR IN THE ROADSTEAD MAKE OF THIS GREAT GATEWAY TO CHINA A PICTURESQUE AND INTERESTING PORT

HONG KONG—how the name stirs the imagination of those who have never been there, how it stirs the memory of those who have.

When we turned out at 5:30 next morning after "all night in" the sight that greeted us was a pleasant one and full of interest. Little more than the impression of a spacious landlocked harbor with mountains on all sides and the lights of a great city in the foreground, had impressed itself on us after our run through Lyemun Pass, under our own sail the previous night. Now on one hand was the mainland with its barren dry looking mountain ranges and the military and naval base of Kowloon skirting the water's edge with its wharves and dry docks. On the other the precipitous Victoria Island, with its picturesque Peak at the base of which nestled Hong Kong, with its varied architecture, its rickshaws and its sam-pans.

The shipping alone was a source of profound interest and entertainment. Graceful steam grey-hounds from the Pacific Coast, big freighters from London and Bremen, medium sized modern looking steamers from Yokohama, a medley of coasting steamers of every description with Chinese crews, lofty four masters from all corners of the earth, big Chinese junks with their mat sails and piratical looking crews, small trig sam-pans sailing swiftly under the guidance of their women skippers and last, but not least grim and stately as they lie at anchor, the representatives of half a dozen of the world's greatest navies. All this and much more combines to form one of the most picturesque, interesting and cosmopolitan harbor scenes to be found the world over.

Before moving closer in shore preparatory to unloading it was, of course, necessary to be visited and passed by the port doctor. This official arrived shortly after eight bells in a smart looking launch and was soon gone again leaving us with a clean bill of health.

In spite of the interest and distractions of our new environment the men were seemingly loath to forget their grievances and the hardships of the passage just ended. When the order to "man the windlass" was given they flatly refused duty and declined to leave the fo'cas'le. Being no longer on the high seas ordinary methods of procedure were not put into requisition but instead the police flag was run up to the peak of the gaff. Within twenty minutes the police boat with four armed harbor police was alongside and after consulting the "Old Man" took the men in charge and steamed ashore.

In spite of being short-handed it did not take long with the help of the donkey-engine to weigh anchor and we were soon towing closer in to where we were to lie while unloading. Our berth was still out in the bay there being few or no wharves and loading and unloading operations being conducted by means of junks and lighters.

Ships, papers, etc., having to be passed, unloading was not to commence until the following morning, so we were kept busy unbending and sending down sail in preparation for a stay which promised to be of some four or five weeks duration. On this occasion no new record was made in unbending. Besides being very short-handed—only the three mates, bos'n, sail-maker and four apprentices—the strange sights of this harbor in a new world were too much for those of us "out east" for the first time and caused us to pay but slight attention to the work in hand despite the swearing and cursing of the mate.

One of the things that impressed us most at first was the fact that all the coolie women wore trousers, just like the men and in the sam-pans did the steering and skippering while the men handled the sail, rowed, etc., as ordered by their wives.

On arrival at Hong Kong it is customary to choose a sam-pan for the ship's use and the competition between the trousered women skippers, as the small craft swarm around a new arrival, is fully as keen as that between cab drivers at a New York ferry station. The sam-pan picked by the "Old Man" was a trig, well-kept craft and proved a source of much interest to us apprentices. To see the family cooking dinner—consisting usually of rice and fish—over a good sized fire in the small cock-pit, the marvellous equipment of lockers and the completeness of household arrangements generally, aboard these small craft—all seemed strange at first. One of the crew of the *Aphrodite's* sam-pan was a very pretty Chinese girl of about sixteen known as Cum-ho, who soon proved to be quite a toast among the apprentices.

After the long hard voyage from New York this complete change of surroundings and work formed a very pleasing contrast to say nothing of the change in diet from salt-horse to fresh meat and vegetables. Wampau Sam's bum-boat was another luxurious feature of this proximity to shore life, and its supply of fruit, Canton ginger, Sarsaparilla, etc., was taken full advantage of by all.

"Pim" the cook having been one of the chief trouble-makers, to say nothing of his being an utter and entire failure in the guise of culinary artist, had been taken ashore with the men and Johnny—one of the apprentices—was installed in the galley and despite being an amateur gave a much more creditable account of himself than his professional predecessor.

It is difficult for those who have never given way to the wanderlust spirit to appreciate the interest and fascination peculiar to the first few days in a strange port after the monotony and hard work of a long passage. Now enjoying the fine panoramic effect stretching before and around us, hearing the musical rattle of innumerable steam winches punctuated by the distant clang of the street cars and the sound of voices in many tongues we forgot entirely previous hardship and discomfort.

There was more of interest next morning at "turn-to time" when a large Chinese junk came alongside and made fast and some hundred or two coolie stevedores swarmed aboard. Unloading our cargo of case-oil now commenced and despite the fact that it was all hand labor without assistance of winches, etc., it was remarkable

for the celerity with which it was accomplished.

As they worked deeper and deeper down in the holds a stairway composed of the cases of oil was formed up to each hatch and up and down this there was a continuous procession of sweating, half-naked coolies each with his case of oil on his shoulder which would be dropped on the chute leading to the junk.

The system of tallying was quite interesting. One of the apprentices was stationed at each of the chutes supplied with a box divided into ten compartments and each compartment containing ten painted bamboo sticks. As each case of oil slid past down the chute in quick rotation a bamboo stick would be placed on it to be taken oft a few yards further down the chute by a Chinese woman tallying for the junk. By the time the apprentice's tally box was empty the woman's would be full then the boxes would be exchanged and the same process gone through for the next hundred cases, each hundred being noted on paper by the mate in charge of that particular hold. Though seemingly antiquated this system is not only simple but effective when the tally clerk for the junk is watched to prevent the sliding of the tally onto the succeeding case in the approved sphynx-like Oriental manner.

This work of unloading continued till noon with the steadiness and regularity of a great machine. On the stroke of eight-bells, however, every thing stopped and "catchee chow" was the order of the day for the next ten or fifteen minutes. Innumerable bowls were filled from the large wooden vessel containing boiled rice which shortly before had been brought on deck from the "chow sam-pan." A couple of bowls of this rice with sometimes the addition of a small relish of some sort comprised the mid-day meal and this after climbing up and down in the hold all morning carrying cases of oil weighing in the neighborhood of sixty pounds to say nothing of there being five hours more of the same work ahead before the next meal.

At the conclusion of this mid-day meal which—on account of its sparseness and the rapidity with which chop-sticks were manipulated—was by no means a lengthy function, fan-tan was at once commenced and all played with true Celestial keenness and stoicism until the expiration of the noon hour when the work of unloading was continued.

With reference to the noon hour an amusing incident occurred one hot day. "Chef" Johnny probably on account of the heat in the galley had evidently indulged himself in liquid refreshment more liberally than was his wont. Be that as it may a fan-tan game crowding too near the galley door met with his displeasure and seizing a handful of the beans he commenced a fusilade of the half-naked gamblers. Fired—amongst other ingredients—with his success, he commenced a voyage of devastation along the deck throwing around beans and knocking down Chinamen in a most impartial, comprehensive and cheerful manner. In a few moments all was confusion—shouting coolies disappearing into the holds, over the side into the junks and sam-pans and even taking refuge up in the rigging—and it was only through great efforts on the part of the mates and head stevedores that the "Chinks" could finally be persuaded to disregard the success of Johnny's ante-gambling crusade and resume work.

In addition to the usual routine of ship-life in port it was necessary to pay almost daily visits to the police court to appear as witnesses in the law case against the men for insubordination and their counter charge against the Captain and officers of brutality. It proved to be an interesting case and was before the court about a week when it was finally decided in favor of the "after-guard" and the men were sentenced to ten days' hard labor in the penetentiary conveniently located on the side of the hill. Hard labor here consisted of a sort of continuous performance of picking up, carrying and setting down a sixteen-pound shot in a dusty prison yard under a broiling sun on a diet of rice and water. This ten days' vacation, however, proved very beneficial to the men even though the recreative facilities did not compare favorably with the advertisements of summer hotels and they were brought aboard at its expiration by a police launch in a much more tractable and reasonable frame of mind.

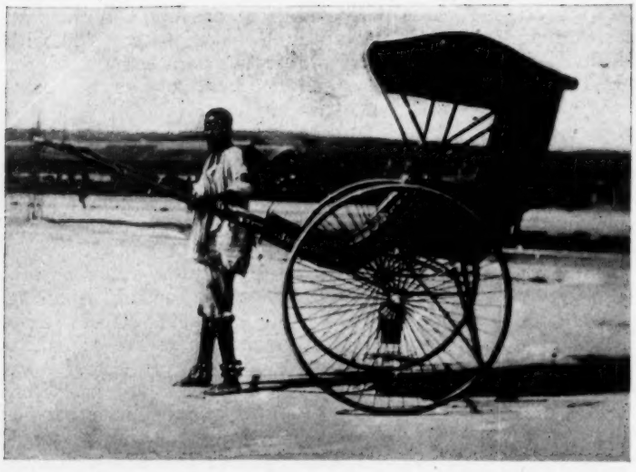
One of the many features of shore life in Hong Kong which appeals to the visitor is the jin-rick-shaw. Driving along in one of these light, easy running little conveyances with a strong, lithe, fleet-footed coolie between the shafts is quite a novel experience at first. At night lit by brightly colored chinese lanterns they flit quietly along the smooth roads and streets, now in the moon light, now in the shadow of foreign smelling locust and other trees, like so many large fire-flies. Gliding along smoothly, inhaling the warm air and varied scents of the East in company with a dainty, doll-like, Japanese geisha girl is a pleasant change after many nights of storm and cold spent on deck and up aloft soaked to the skin with salt-water and it is characteristic of the deep-water sailor to take both as they come with but little comment.

It is hard to describe the novelty, wierdness and fascination of it all when after a long rough voyage full of hardships and privation one finds oneself ashore with everything about one new and strange and interesting. What a flavor and enjoyment one discovers in the every day almost insipid pleasures on shore of eating and drinking. How vividly the different street scenes impress one. What innumerable scents and sounds greet one at every turn. What a relief it is to see new faces and hear fresh news and topics after the long monotony of the voyage. How beautiful any and every woman appears before the sense of comparison can revive and come to life again. Lounging comfortably in a swiftly moving rick-shaw, absorbing the surroundings luxuriously with all one's keenly tuned senses simultaneously, produces a feeling of exhilaration difficult to describe in words.

It was an almost daily experience for those of us who had to appear in court to spend a convivial hour with the Captain and which ever of the mates were not on duty, at the fashionable King Edward VII. hotel discussing the progress of the case and its probable outcome. After which as a rule it was not usually deemed necessary to hurry aboard, it being now past "knock-off time" in any case, so we would split up into small but congenial parties and fare forth in search of further adventures.

The eastern looking lanterns and smell of incense everywhere together with the soft enveloping mantle of night with its coolness and fragrance seemed to throw an even greater charm and spell over everything which spell sometimes would not be broken till the going aboard in the cold gray of the next morning barely in time to turn-to with all hands and now the contrast would not be so pleasing but would induce recourse to that inward philosophyzing on life so natural to the deep-water sailor.

CHINESE JUNKS WITH THEIR MAT SAILS AND PIRATICAL LOOKING CREWS CONTRAST EXTREMELY WITH MODERN COASTING STEAMERS, AND THE TRIM GASOLINE ENGINED LAUNCHES USED BY THE CUSTOMS AND HEALTH OFFICERS. THESE NATIVE CRAFT HAVE CHANGED BUT LITTLE SINCE THE DAYS OF MARCO POLO



WITH A FLEET COOLIE BETWEEN THE SHAFTS, AND DRIVING ALONG THE SMOOTH ROADS AND STREETS, THE JIN-RICK-SHAW APPEALS TO THE VISITOR. AT NIGHT GLIDING ALONG IN THE MOONLIGHT IN COMPANY WITH A JAPANESE GEISHA GIRL, AND INHALING THE WARM AIR OF THE EAST, ONE SOON FORGETS THE HARDSHIPS OF A LIFE AT SEA

When unloading was completed there was some delay occasioned by our orders (directions as to cargo and destination not having been received and a couple of weeks were spent in working around the decks, repairing the rigging, renewing running gear, etc., a phase of sailorizing much relished by shellbacks generally. On account of this slackness the ship's sam-pan was discharged and the gig put into commission.

The gig besides oars carried a good sized mainsail and jib and made many a fast passage to the wharf on fine mornings when the Captain had had his breakfast and was bound ashore to the agent's office to await the expected orders. Where these would send us was now the chief topic of conversation and caused a great amount of speculation both verbally and financially.

Sailing the gig was very enjoyable work and the boat's crew consisting of two apprentices (of which the writer was one) were the envy of all hands as they spent the days cruising back and forward between the ship and the shore with passengers, provisions, etc. Sometimes, however, there would be no wind and then things would not be quite so soft. The wharf was rather more than a mile distant and pulling a heavy boat frequently loaded to the gun'ale with sacks of potatoes, etc., under a hot sun and with a strong tide running made even our comfortable costumes, consisting only of duck trousers, belt, sheath knife, and jumper, seem more than enough.

Boat crew hours were also quite irregular especially after one or two other sailing ships arrived the captains of whom were great friends of our Old Man. Then it would mean catching a doss on deck or in the gig while the two Captains would be in the after cabin and the two mates in the mess room. The voyage back was frequently somewhat hazardous on account of the hospitality customary to wind jammers—on one occasion after colliding with a junk loaded with bamboo and getting our sail badly torn we had finally almost beaten up to the ship against a stiff breeze when the mate suddenly stepped over the side and after being pulled aboard remained so hilarious that he was with difficulty prevented from repeating the performance in spite of the fact that he could not swim a stroke.

The view of Hong Kong and its spacious harbor as seen from the gig at night is most impressive and as one plows steadily and quietly along with a nice breeze the towering hulls and spars of big merchantmen lying at anchor loom high overhead looking grim and weatherbeaten and one falls to thinking of the dark deeds and tragedies—by no means infrequent on long sailing voyages—that may have been enacted aboard since the vessel left her last port.

Sometimes when beating back to the ship against a stiff breeze and choppy sea in the early hours we are glad of a tow from a friendly police launch. Owing to our court case the old man and the police are rather intimate and this recalls an amusing experience of the writer and the third mate.

One evening while one of the police sergeants was taking supper with the Captain, the third mate and myself feeling the need of shore recreation concluded a hasty toilet and assuming all the dignity at our command marched down the gangway into the launch and with an "all right John" to the coolie quarter-master were soon puffing shoreward. The shrill police whistle, however, caused "John" to put his helm hard over and we were shortly back at the gangway and went on deck to be soundly berated by the angry sergeant. As soon as this dignitary had again retired to the hospitality of the after-cabin we once more went aboard the launch and with sufficient assurance evidently to convince "John" that we had merely been recalled for further shore commissions—at any rate we were soon again under weigh and this time talked so loudly that with the assistance of the engine there was little chance of a second recall being heard by the unsuspecting "John." As we stepped on to the wharf enjoying every move with the zest of forbidden fruit we could not help but feel amused as we tipped "John" to think of his surprise on finding the warm reception which awaited him when he got back to the *Aphrodite*. Our return was several hours distant and shore and its attractions was all we were interested in right then, our motto being "sufficient for the day," etc.

One of the duties which devolved on the boat crew about this time was the laying in of a supply of sand for use in scrubbing the decks and brightwork. Some interesting trips in the gig were consequently taken in search of sand of the required gritty character. Owing to the fine sailing breeze and the over-powering attractions of a prolonged dip when well out of range of the ship the sand getting was usually accomplished with considerable haste when it became time to return aboard. Later in the voyage when "sand and canvas" became for the time a steady routine, we had cause to regret not having made greater efforts to procure better sand and all hands did considerable growling though the boat crew secretly consoled themselves with the pleasant memories of those cruises.

The *Aphrodite* begins to look quite trim again, the yards having all been painted and other touching up done around the decks. Being light we are of course very high out of water which affords fine diving in the daily swim taken by the apprentices and some of the officers at knock-off time. The men still require to be watched rather

WITH EVERY BIT OF STANDING AND RUNNING RIGGING TAUT, OR CAREFULLY LAID DOWN, THE DAYS IN PORT, WHEN THE CARGO IS AT LAST UNLOADED, ARE GIVEN TO SCRAPING AND PAINTING. THE DECK HOUSES ARE FRESHENED WITH WHITE, ALL IRON WORK PAINTED AND EVERY PART OF THE SHIP AND HER GEAR PUT IN READINESS FOR THE NEXT VOYAGE

carefully, one—a tall Westerner—having got ashore at night in some passing sam-pan with evidently no intention of returning. An apprentice has consequently been put night watchman and after sleeping and loafing all day comes on duty at 6 p. m. and keeps guard till 6 a. m. With the heat and noise around the decks through the day this post is not considered any great snap but change is an always welcome quest to the deep water sailor who likewise knows the art of sleeping under the most adverse conditions.

A few days before the arrival of our orders the typhoon signals were hoisted on shore and almost instantly a real transformation scene took place. The harbor which a few hours before had been alive and swarming with small craft of every description is now deserted except for the ocean going vessels and these have let go second anchors and paid out more chain. The junks, sam-pans and other small craft have all sought shelter in the inner basin and are there moored so securely and compactly that not another square inch of space seems available. Some even have been pulled up in the fields and everything securely lashed down. No better testimonial to the violence and destruction of these typhoons need be had than the promptness of the natives to seek refuge at the very first warning of one likely approaching.

As it happened on this occasion though the signals were flying for three days and all shipping practically at a stand-still the typhoon passed by without touching the vicinity of Hong Kong. When the signals were hauled down it was remarkable to observe how suddenly the harbor assumed its wonted busy appearance.

It was during the lull occasioned by the flying of the typhoon signals that I had a rather interesting adventure. An important prize fight was scheduled to take place in one of the theatres at 9 p. m. so shortly after supper having donned bathing trunks and rolled my clothes up in an oil skin coat which was then placed in a small wooden tub a quiet descent was made of the companion ladder and I was soon striking out for shore some mile and a quarter distant towing the tub by a string held between my teeth. Fortunately the wind was strong and fair or otherwise the voyage might not have been so satisfactory. As it was with the tub in tow it seemed as though the shore would never get nearer and going back against wind and waves was out of the question. Two exciting moments occurred—one when soon after starting something touched me between the shoulders and caused unpleasant visions of sharks, etc., the other was when swimming past the small government island used for storing powder and seeing the outline of the armed sentry against the sky as he paced back and forth the thought flashed through my mind that he might either from suspicion or mere curiosity make a target of the phosphorescent disturbance my strokes made in the water. The swim came to an end at last and it was an awestruck group of coolies that saw me appear on the dock arriving apparently from nowhere, carrying the tub and then proceed to make quite a thorough toilet from its contents. Their wonder as article after article appeared even down to time piece and money was most ludicrous.

IN THE EAST, WHERE THE TYPHOON BLOWS THOSE WHO FOLLOW THE SEA FOR A LIVELIHOOD HEED WELL THE SIGNALS THAT ARE FLOWN TO HERALD ITS COMING FOR THESE WINDS BLOW—BLOW AND RESPECT NOT SAMPAN NOR STEAMER, WHITE MAN NOR YELLOW

HAVOC IS WROUGHT ASHORE AS WELL AS AFLOAT WHEN THE TYPHOON DEVIL LETS LOOSE. HOUSES, TREES, EVERYTHING STEPS ASIDE BEFORE ITS MIGHTY RUSH. HERE'S A WIND TO RESPECT, AND ONE THAT BOWS NOT TO THE CYCLONES OF KANSAS NOR THE HOWLING ICE-LADEN GALES OF THE HORN

The fight was well worth the difficulties encountered in getting there and afterwards it having become so rough that it was impossible to bribe a sam-pan to venture out I spent a comfortable enough night in a snug corner on the dock being unwilling to let any chance slip of getting aboard before my absence was noticed by the Old Man. An enterprising sam-pan finally happened along and sailed me out to the *Aphrodite* where I arrived tub and all just in time to turn-to and much to the surprise of the mate and others who were not in the secret.

"Adelaide (South Australia) in ballast and load wheat" was the interesting news the Old Man gave the boat crew as they headed shipward the following evening and the captain had barely reached his cabin before the word had been passed to all aboard.

The group at supper that night came as near being animated and excited as one is apt to find aboard any deep water sailing vessel. Living under conditions which take one to the most remote and unexpected corners of the earth at any time and where even in trivial every day matters, orders, whether right or wrong, have to be carried out, it is rather natural that any unnecessary display of surprise or excitement is at a discount.

Our being sent to Australia was pleasant news to all, the probability being, according to general opinion, that we would be ordered to the "west coast" (South America)—that bug-bear of all sailors on account of having to do one's own stevedoring—to load coal.

Taking in our ballast, consisting of stone and gravel, was commenced the following morning by coolies and a general stir and activity was noticeable about the decks as bending sail and other preparations for going to sea again were attended to by the crew.

Bending sail aboard a big four master is a picturesque and interesting sight and comprises one of the most sailor-like duties of the present day sea laborer. The way an experienced man moves around on the

SALT WATER MAY SWEETEN THE HOLD BUT TOO MUCH OF IT IS BAD FOR THE CARGO SO NOT THE LEAST OF THE CREW'S TROUBLES IS PUMPING SHIP

THE HOOK COMES UP HARD AFTER A LONG STAY IN PORT AND ITS RAISING PORTENDS ONCE AGAIN NIGHTS AT SEA, HARDSHIP AND DANGER

extreme yardarm of the loftiest yards is quite a thrilling sight to the layman onlooker and as one big sail after another is hoisted aloft and worked into place it makes a pretty picture.

There are quite a number of sailing ships in the harbor and besides the *Dusseldorf*, who is still awaiting orders, a British bark—the *Lalla Rooke*—that was in New York with us also, has come in and found orders for Adelaide so the promise is that we will have another exciting deep water race over to Australia and as the captains are great chums a friendly bet of no small amount has been made on the result.

Supplies and provisions are being taken aboard and with these we get a Chinese cook who proves himself to be a cook in more than merely the name. Considering the materials at his disposal it is really remarkable what he turns out and everything is piping hot. Even after we get to sea and have some bad weather, which is the real test, this continues to be the case.

The "Chink" proves quite a source of interest to some of us not yet fully accustomed to the East and this interest is shared—perhaps not altogether voluntarily—by the new cabin boy. One of the surest things that can be reckoned on in regard to life at sea is that the cook and the cabin boy will be mortal foes and this proved fully to be the case aboard the *Aphrodite*. It became a common sight to see the Chink armed with a large carving knife pursuing the cabin boy along the deck and this cheerful individual—who was both stronger and heavier than the cook—had frequently to retire to the rigging till things quieted down. Another of the Chink's favorite missles was boiling water which he could throw from a dipper with great dexterity. "Cupid" (the cabin boy) was also dexterous, however, in avoiding these onslaughts and the most usual outcome of the hostilities was the Chink sporting a black eye.

A fact that impressed some of us with considerable awe and also envy was that our celestial culinary artist did not seem to be hampered with such weakness of the flesh as the ordinarily considered necessity of going to bed. During the entire passage to Australia he was never seen to lie down. The nearest approach to this was when late at night his customary devotions to Joss concluded and his stoical smoking of opium he would sit down on an old soap box in the corner of the galley—which like himself was always scrupulously clean—put his feet up on the coal bin and go to sleep, which even then he seemed to do with one eye and one ear open.

The last few days in port were very busy ones and especially so for the boat's crew as the gig was kept almost constantly on the go all day long between the ship and the wharf and at night the Old Man had visits to pay to other vessels. Fortunately for the crew of the gig the weather was now breezy and the gig was able to prove worthy of the reputation she had earned of being the best sailer in the harbor exclusive of the sampans.

Many were the interesting experiences which happened to the crew of the boat in these short voyages in that always interesting harbor and not the least of these took place a few nights before sailing.

Soon after arriving at Hong Kong it was found that the former bos'n of the *Aphrodite*—whom we had lost in New York on account of his being occupied ashore spending his pay-day—was aboard the *Dusseldorf*. This bos'n was a Nova Scotian from that home of so many famous deep water men, Halifax and was one of the best known hard case bos'ns of his day. The captain was not only anxious to get his old bos'n back but he (the bos'n) was extremely desirous to get clear of the Dutchman and to come back.

It was a dark night and everything having been arranged the boat's crew got away quietly according to orders promptly at four bells, in the first watch. We glided along quietly under muffled oars and were soon under the bows of the big German. A quiet hiss proved that our man was ready for us and soon a canvas kit bag was lowered down on a rope's end to be followed by a mattress and sundry other belongings. These in turn were followed not only by "boss" but by his chum the sail-maker as well, who was a New Yorker and proved himself to be a splendid ship mate. We were soon safely aboard the *Aphrodite* and the hospitality of the half-deck (quarters occupied by the apprentices, bos'n and sail-maker) proved itself to be fully equal to the task of commemorating the occasion in an entirely fitting and thorough manner.

Things now began to look like going to sea in earnest. The water tanks were filled up and also those in which the ship's biscuits were stored. These Hong Kong biscuits by the way, which were square and crisp, were the best "hard bread" we got at any port.

A sam-pan load of dainty Japanese geisha girls paying a farewell call on Sunday afternoon in token of many pleasant calls that had been paid them ashore helped to bring home the fact that soon the comfort, enjoyment and many interests of our present surroundings would be a thing of the past, and hard work, hard living, hard words and hard men with an outlook composed of salt water, sky and clouds would comprise our life for the next several months.

By noon next day all final arrangements having been completed the windlass was manned and to the words and tune of an old time sea-chanty, sung by an old shellback with all hands joining in the chorus, the anchor—which had lain quietly in the mud for the past six weeks—was broken out and heaved up.

Behind the puffing little tow-boat, the harbor, which had come to feel quite like home, was soon hidden from view by the precipitous headlands, as we towed down the channel and, headed out into open water. All hands were now kept busy

(*Continued on page 37*)

The Second Chance

BART KENNEDY

JUST as they were at the edge of the harbor the nor'wester smashed down. The schooner seemed to be struck in all places at once. For an instant she was rigid.

"Let go the anchor!" shouted the captain.

Jones, who was standing by forward, levered the fluke of the anchor over the gunwale with a capstan bar. He saw the splash after it struck the water. But he heard no sound. It was lost in the sudden roaring of the wind. The anchor-cable went out and out.

At last the anchor chocked. And Jones looked up towards the captain. He could see that he was shouting, but he could not tell quite what it was that he meant him to do. The schooner was in the midst of immense, violent sound. And she seemed almost as if she were heeling over with the vast press of the wind. And then the meaning of what the captain was trying to convey came quite clear to him. He wanted the anchor that was on the starboard side to be heaved over also!

"Rotten," muttered Jones. "They'll not stand for it in this. He'd better keep one in case. The cables'll smash like packthread."

To get over to starboard was a job indeed. The schooner was heeling down to port in an awful way. But he managed somehow. It was—as the deep-water sailors say—a case of one hand for the ship and the other for himself! But after what seemed to him to be a long time of struggling he got the capstan bar under the anchor-fluke and heaved it over.

And then it was that the cable of the port side anchor snappped. He felt the sudden swish of the inboard end of it as it all but struck him. An instant after the other cable snapped. Both anchors were gone!

The schooner was now up in the wind. She was going about on her own accord. The jib was sputtering madly. The sheet and the blocks were in a hurtling tangle. The sheet was ringed to a thick wooden traveller that stretched right across the foredeck. This traveller was now giving trouble. For—being of wood—it was worn and scarred in places, and the ring of the sheet had become stuck at the windward side. Jones would have to do as he had done so often before—he would have to stand on the traveller and kick the iron ring along it to leeward.

He managed to get a hold on the hurtling jib-sheet, and then he began to boot the ring along. He seemed to be having a dozen rough-and-tumble fights at once. But he was gradually getting the traveller in the right direction. He had got it now amidships. The noise of the storm was such—and the amount of sea that the schooner was taking over the foredeck was so great—that there were times when he could hardly tell whether he was overboard or not.

He soon knew, however. For the wooden jib-traveller gave a sudden bend upward—cracked—and Jones was shot high up in the air.

* * * * *

It seemed to him that he was a long time going up. There had come another power of sensing his consciousness. A vast number of things were rushing with lightning swiftness through his mind. Parts of seconds were to him as long as if they were minutes. But he did not define it to himself in this way. For some strange reason or another he seemed to be a long time going up in the air. That was all he knew. All sorts of things and places were in his mind. There were coming to him all sorts of memories of the happenings of the past.

He began to fall down at last. It was very curious. It seemed as if he had been suspended in the air. He was coming down. Would he fall on deck? No, he was coming down just by the side of the schooner. He could see the captain looking at him. Karl was looking at him from amidships—the German with whom he had fought the day before. He was falling slowly into the boiling, raging water. He could feel something warm running down his face. Blood! A splinter from the traveller must have struck him on the head!

Suddenly he felt himself going with a quick plunge down. He was in the water. It was boiling and working around him and over him. And then he felt a stillness in it. He could not tell whether he was going down or coming up.

He was up. He was able to take a breath. Just a breath and no more. For the comb of a wave struck him full in the face. Another smashed him under. But he kept cool. He managed to kick off his shoes.

He was up again, and he managed to get what was only part of a breath. And then he knew that he was done for. The boil of the water was too much for a swimmer to live in it. But still he kept cool. He kept his head. He would die, but he might as well die calmly.

When next he managed to get part of a breath he tried to get a glimpse of the schooner. He must be quite close by her. But he could see nothing. He was all but blinded by the fling of the water.

And then it was that the coolness left him. He began to choke and gasp. He was being smothered. Fine swimmer though he was, he was drowning.

* * * * *

There came to him a sense of glorious ease and langour. He was in a hall that was great and wide and vast—a hall filled with soft light. In the middle of it was a strange looking man with a long white beard. He had shining, sympathetic eyes.

This man with the beard was coming towards him. And he was carrying what seemed to be a chain. Yes, it was a chain. The links of it were big and rusted and dark, and they were wet also.

"Grasp!" commanded the man with the beard as he came up. "Grasp and receive life."

He grasped the chain, and all at once the hall and everything in it was gone. He was back in the midst of the boil and the roar and the surging of the waters. He was choking and dying, but he was still grasping the chain that the man with the beard had offered him. He was confused, the water was choking him, and thundering upon him. But he clutched the chain; and then in obedience to some command, that came from beneath his consciousness, he pulled himself up by it till his head was above the water.

It was the bobstay of the schooner! She had drifted right on him as he was drowning!

He had escaped death by a chance in a thousand. His head was not altogether clear, but he knew that he was safe. The surge of the waters battered him and knocked him about, and at times he went under. But he stuck to the bobstay!

After a while he got to himself a little, and it occurred to him that he might as well climb up the stay and get aboard. This he proceeded to do. He hauled himself slowly up hand over hand. It was a hard fight, and once he was nearly swept from his grip. But he managed at last to get his head over the bowsprit.

He heard a sudden shout. It came from Karl, who was standing by the foremast, clinging to a halyard. Fear was in the shout, for the sight of the face of Jones, as it came up by the side of the bowsprit, was startling. He had thought that Jones was gone for ever. But there he was—coming slowly up—his face covered with blood.

Karl left the foremast, and made his way cautiously towards Jones. And he helped him up over the side on to the deck. Though there was no love lost between Jones and himself, still he was glad enough to see him back. Being on the same boat or ship binds men together, even if they are enemies.

The schooner had now become almost unmanageable. The captain was still at the wheel. He made a sign to Jones to come aft to him.

"Hurt?" he asked, as Jones got near him.

"No," he answered.

"You're bleeding."

"Slight bash on the head," said Jones. "Nothing much. I could do with a slug, captain."

"Certainly," said the captain. "Go down into the cabin. You'll find the whiskey in the corner of the port locker. Good thing she drifted on to you. Take a good slug while you're about it, and be up quick on deck, we want you."

"Thanks, captain," said Jones.

In this particular brand of boat the captain was never called sir. It was just plain captain.

He had to be careful as he opened the door of the companion-way leading down into the cabin. For the schooner was taking water over the after deck. He had to open the doors, get quickly through and close them when the favorable two or three seconds arrived.

He was wet, of course, but that mattered little. There was no time for him to change, and even if there were what change of clothes he had were forward in the little forepeak.

He found the whiskey in the place indicated. The bottle was nearly full, and he poured out a most generous allowance for himself into a thick tumbler. It was strong, very obvious whiskey, but he took it down as if it were milk. He needed it. He was not a man who cared much for whiskey as a rule. But this was one of the times when it was in place.

He put the bottle back into the locker and went up the companionway and on to the deck. He was in no sense the same man. The potent spirit had put a wild and vigorous life into him. He was warm, his blood tingled. The accident that had happened to him was now a thing very much of the past.

"Had your slug?" asked the captain.

Jones answered with a smile and a nod.

"Go see what you can do with the foresail, then," said the captain. "The jib's no use. We'll have to raise the foresail and keep her as steady as we can that way. Go see what you can do, Jones."

The storm was now more furious than ever. The thunder was roaring and crashing, and there were times when the lightning was one vivid, intense sheet of flame. One of the men aboard was sitting amidships. He was afraid and cowed. The storm had taken the manhood out of him. He was crying. Though used to schooners, he was but a fair-weather sailor.

Jones scowled and cursed him.

"Get up!" he exclaimed and he made as if to strike him. But he stopped. Nothing could be done with a man whose nerve was gone!

The foresail had been let down after he had been flung overboard by the breaking away of the jib traveller. At the moment they were drifting and swinging about under bare poles. The schooner was rolling like a tub. It looked as if she might founder. Though she was not really likely to do this, still if she were not kept steady it was hard to know what might happen. If a sea were to strike her—and another came on the top of it and struck her again before she could right herself—and another came on the top of that again and struck her, the mischief might well be done.

She would sink and all hands would be lost!

Jones and Karl and Tom worked to get the foresail. It was a difficult job, for as soon as the sail was up a little the pressure of the wind was such that the throat of the upper boom was jammed so hard against the mast that it could not be moved. They would loose the jam by a skilful managing of the throat and peak halyards, and then they would get the sail up a little higher. And a little higher.

Finally they managed to get it up so that they could double-reef it.

The captain helped them by doing what he could to keep the schooner up in the wind. This was a hard job, however, for in a sense, there was nothing to grip. True, there was force enough round the vessel. But it was force that was anywhere and nowhere. The schooner could in no way take advantage of it. It was simply smashed and battered about. And it was in danger.

All hands were anxious until the shortened foresail could be got up.

Just as they were swinging their weight on the peak halyard to get it taut, the schooner took a big sea amidships. It caught the man who was afraid—the man who was sitting down. He shouted and clutched wildly. But it had him. He was swept overboard.

Jones left the halyard to the others and made his way quickly aft. A life-belt was fastened up on the deck of the cabin-house. He cut it away from its lashing. The captain saw what he had done, but made no comment.

He was back again amidships, and was about to throw the life-belt overboard, when some one grabbed it. It was Karl.

"What for you throw it?" he asked. "It no use is. We want it."

"Leggo," growled Jones, and he struck Karl heavily in the face.

The German let go his hold, and Jones heaved the belt overboard. It was useless, he knew. There was hardly a chance in a million of the man being able to get it. But he felt that he ought to get what chance there might be.

The shrieks of the man pierced them through the sound of the storm. And then they stopped suddenly. He was gone—lost.

In a moment all thought of him had left the minds of the men on the schooner. Their own danger was so pressing and so imminent that there was no room for thought of anything else. Karl and Jones stood close together by the foremast, but the idea of quarrelling was now gone from them utterly.

There came into the sky a more terrible darkness, and the fury of the storm became suddenly greater. And then came a splitting sound that was followed by an immense crash. The foremast was gone. It had been swept over the side, and was now held by part of the shrouds. Jones freed it by cutting through the shrouds with an axe. When he looked around after freeing it, he could not see Tom. He had gone.

Nothing at all could be done now. The schooner was being smashed this way and that. The captain had left the wheel and had gone into the cabin. Karl was lying, holding on to the cleats at the foot of the mainmast. A great wave, that thundered across the deck, caught Jones. But instead of taking him overboard it swept him, by some curious movement of itself, into the scuppers. He got up, confused and shaken, and made his way aft towards the captain, who had now reappeared. Jones looked at him, and the captain smiled oddly.

"We're done," he said. "Look out for yourself."

A strange exaltation had come to Jones. Though death was at hand, he did not feel afraid. He felt lifted, elated, Death was here, but in his veins was running a fire. It seemed to him that it was a fine thing to die

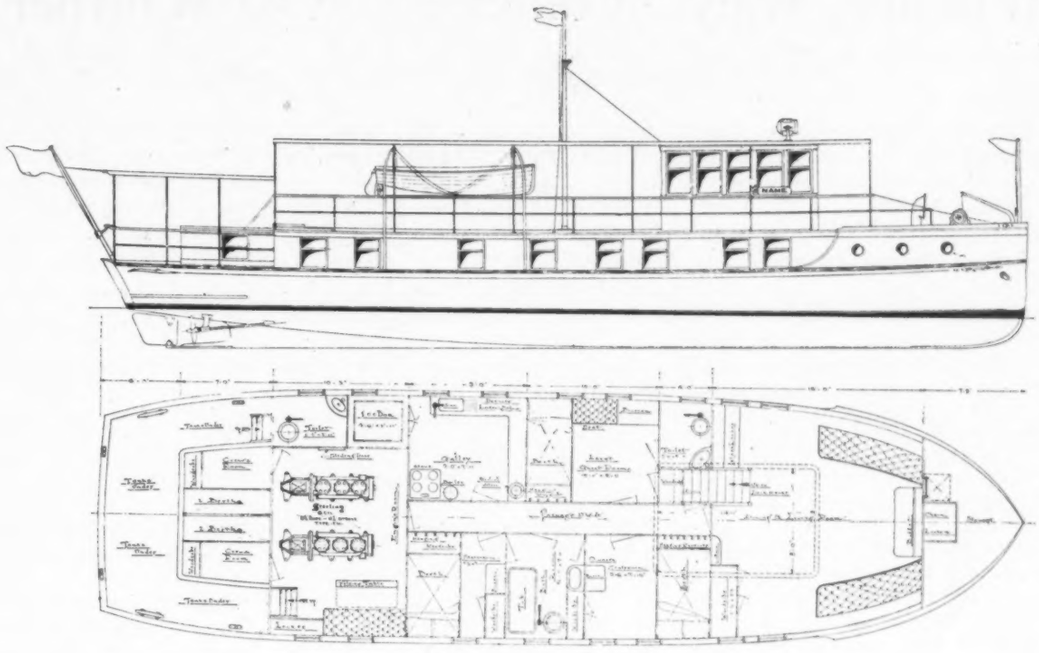
(Continued on page 36)

AMERICANISM

THE following resolution was unanimously adopted by the Board of Directors of the Rockaway Park Yacht Club, Rockaway Park, N. Y. That all alien enemies or persons who are not in perfect sympathy with the United States of America in the prosecution of the war, or persons who have expressed views or have engaged in any activities not in accord with the sentiments of the absolute loyalty of this Club to the United States Government shall not be permitted to visit the Club House or to be introduced therein as guests.

It is the purpose of this club to exclude from its hospitality all those of whatever nationality they may be, who harbor unpatriotic and un-American thoughts, and who deliver unpatriotic and un-American utterances.

The Club is not only American in its name, but in its thoughts and actions, and it wishes to harbor no one either as member or guest, whose whole heart and soul is not for and with America and her allies.



70-ft. Houseboat with Large Accommodations

ONE of the new boats to be built after the war will be a 70-ft. houseboat recently designed by J. Murray Watts, N. A., of Philadelphia, for a prominent New York yachtsman.

Its general dimensions are: 70 ft. over all, 68 ft. water line, 19 ft. beam and 2 ft. 8 in. draft. While this boat is similar in many respects to houseboats built from this firm's designs before the war, the main feature of interest is the unusually large beam, being 2 ft. to 3 ft. wider than the average houseboat of this length.

Specially strong construction of the transverse framing members will be obtained by the use of steel frames and floor frames, while wooden construction will be utilized for the planking. This composite construction gives increased strength with a very considerable decrease in weight, allowing the draft to be kept very small even when fully loaded for a long cruise. Owing to this wide beam the accommodations are especially good. There are three large staterooms each of which have a bath or toilet room directly connecting. There is a dining saloon forward, 16 ft. by 16 ft. and a large deck house which will be used as a breakfast room or smoking room.

The power plant will consist of a twin-screw outfit of 6 cylinder Sterling engines 5½ in. bore by 6¾ in. stroke, of the FH, or heavy duty type. A 10 h. p. Sterling Kid motor will drive the electric plant, and the same size motor used in the two power launches.

The boat will be finished in teak outside; the saloon below decks will be panelled in black walnut relieved with a fine gold stripe; the three staterooms will be panelled in bird's-eye maple, white mahogany, and butternut respectively, and the toilet rooms, bathroom and galley in tiling.

As the boat will be used largely in Southern waters, special ventilating system will be fitted and 7 ft. headroom given in the living quarters.

NAVY NEEDS AT ONCE
1,000 GAS ENGINE MEN

THE Naval Reserve Force must enroll at once 1,000 men experienced in the operation and maintenance of gasoline engines.

This is an urgent call. The men are required for immediate duty. They will be rated as Machinist's Mates.

Age limits are eighteen to thirty-five inclusive. Applicants must be American citizens. Draft registrants with letters from their local boards will be accepted.

Apply at Naval Reserve Enrolling Office, 51 Chambers Street, New York, or any Navy Recruiting Station.

A Chapel of the Seas

THE most wonderful cave in the world is in the island of Tonga, in the South Pacific. Byron called it "a chapel of the seas." It is formed in a rock that is almost surrounded by the ocean. This rock is about sixty feet high and broad proportionately.

Many years ago a boy, the son of a native chief, was chasing a huge turtle, when his game seemed to sink into the rock. The lad watched and waited until the tide fell, disclosing a small opening in the rock about six feet under low-water mark.

Diving bodily, the young hunter entered the aperture, and, to his surprise, came to the surface inside the rock. The rock was hollow, and its interior was found afterward, when the natives explored it with torches, to contain many beautiful stalactites.

When attacked and followed by enemies, the natives, who know the secret, leave their canoes, plunge into the water and disappear. Their foes linger, astonished at their disappearance, for no person not acquainted with it would suspect that the rock was hollow.

Whence, Why, Wherefore, Also Whither?

Or the joys of yachting as depicted in one of our popular weeklies

THE following graphic language is reproduced verbatim from the columns of one of our esteemed contemporary weeklies (not a nautical publication).

We have given earnest thought to the question of whether it describes a golf match or a boat race.

Suggestions from our readers will be received with gratitude.

"I was running back from Bridgeport in the Barnacle Goose; a long starboard tack and a short leg to windward; slow work, sailing full and by. The slim thirty-two footer was cutting through the swell like a plow turning up a furrow. An early June gale had lashed the Sound into a seething caldron the day and night before, and I had lain over in the Connecticut town, on the way home from the Brooklyn yacht yard, to give it time to abate. A very clear sky, with the water blue as ice, with a curling white foam like the snarl of a dog. Old Field Point rose up before us, and little by little the dun breakwater of Port Jefferson appeared. The wind freshened off land, a tricky sou'wester. Young Patrick, eighteen, blond, lank, sometimes caddie for me, sometimes mate of the sloop, was lying forward, coiled up between jib and mainmast.

"We'll take a reef," I decided.

We lay to and knotted the reef points; bound taut the halyards.

"Take in the spinnaker and put on the spitfire jib!" I shouted.

We cut into Mount Sinai, scuppers down. The long cross-tacking had put me out a matter of hours, and already the full force of the neap tide was pouring through the inlet like a stream from a fire hose. The deep, shell-strewn channel seemed to flash before us like a flying belt. Puffs of wind struck at us like the jabs of a boxer's glove. On the right was the sandy white beach. On the left, a flurry of blue water, where the tide met the waves of the Sound. In an eye flash I saw a great figure in flannel shirt and riding breeches, standing ashore, watching the fight. But I had no time to look at him. I was too busy at the tiller.

"Keep an eye out forward," I told young Patrick. "I don't want to rip the bottom off her."

He crawled over the starboard bow.

"Not a chance," I decided. "Got to stand out. Hard alee!"

He may not have heard me; or the quick swirl of the boat may have taken him unawares. My own eyes were fixed on the pocket of the sail. So I noticed nothing until I heard a yelp and saw young Patrick being swept out by the current as a leaf is swept along by the wind. The Barnacle Goose flew down before the wind on the tide like a racing car. As I swept by I reached out; missed young Patrick by an inch; then threw overboard a life belt; saw it whirled along before it ever reached him. I came about. There was a hundred yards between us; and I saw young Patrick go down for the first time.

"Good-by, old Barnacle Goose!" I said.

There was nothing to do except let her pound to pieces on the shore. I stood up to dive. "Stay where you are!"

Across the channel, tearing through it in a flurry of foam like a power launch, went the man who had been standing on the beach. I am a fairly powerful swimmer myself; but I had yet to see anything like the way those great arms crashed through the water, like the paddles of a ferryboat, and the legs churned like a propeller. I saw him reach young Patrick. I saw the lad's frenzied, terrified attempt to catch the man by the arms. I saw the swimmer's left arm shoot out and catch the boy's neck. I saw the right whip overhand out of the water and the fist land flush on the jaw. Leisurely he swam toward the boat, easily as a porpoise, towing young Patrick. I helped them in. The swimmer swung into the cockpit, hardly even panting.

"If you had gone overboard after him she'd have been pounded to bits," he said in a low, gentle voice. His eye went appreciatively over the graceful Herreshoff lines of the Barnacle Goose—the rake of the mast; the snug set of the sails. "It would have been a pity. Such a bonny sloop!"

And so I met Jörn Olsen.

Averages Count, Not Individual Efforts

IN line with the policy pursued by the *Emergency Fleet News* of publishing notable day records of American riveting gangs, our daily press has been devoting considerable space of late to the recently instituted international contest in rivet driving between American and British shipyards. As a result of the keen rivalry started, some remarkable performances in the way of rivet driving have taken place. At the time of this writing, the best record so far reported has been that made by an Englishman, who is credited with having driven 6,783 rivets in nine hours in a shipyard on the Clyde. This is more than five times the number driven by a good riveter in the course of a day's work under ordinary conditions. Despite the high totals recorded, the advisability of holding such riveting contests may well be questioned. As pointed out by the secretary of the British Boilermakers' Society, they tend to demoralize the workmen and to reduce the total output. In one case, we are told that practically all the workmen in the yard knocked off work for an entire afternoon in order to watch and encourage the contestant. Furthermore, high quality workmanship—which is preeminently called for in all branches of shipbuilding—cannot be expected where rivets are driven at breakneck speed. Nor should the intense physical exhaustion following such a terrific nine hours' strain be overlooked, which it must take the candidate for riveting honors, even under the most favorable circumstances, a number of days to recover from.

A HERRESHOFF SLOOP WITH RAKING MAST:

THE SPIT FIRE JIB IS NOT SHOWN

Navigation for Amateur Skippers

A Practical and Informative Article on How to Plot Out the Boat's Course, Determine Her Position While at Sea, and Handle the Craft With the Safety of the Professional

By LIEUT. COM. F. W. STERLING

PART III

IF bearings are taken of an object at 22½° and 26½° from ahead, then ⅛ of the distance run between bearings is approximately the distance at which the object will be passed abeam.

The method of obtaining the position by two bearings on the same object is very useful, for frequently it is necessary to locate one's position when only one landmark is in sight. A good navigator never misses an opportunity to check his position by a bow and beam bearing on every well charted object passed.

It must always be borne in mind that the results from this method will be incorrect unless the "course and distance made good over the ground" are correctly estimated. Bad steering, cross currents, or leeway of the vessel will cause inaccuracy in the estimated course, and a current with or against the ship, or inaccuracy in the distance logged will affect the estimated distance. A current with the vessel will give a position closer to the charted object than the actual position, and a current against the vessel will give a position farther away than the actual distance. If the local current is known, allowance can be made for it when working this problem.

(2) To Get the Vessel's Position When Two Objects of Known Position Are in Sight. (*Cross Bearings of Two Chartered Objects.*)

Select two well charted objects whose respective bearings dieffr as nearly as possible by 90°. Take the compass bearings of these objects when the vessel is on an even keel, and as quickly as possible one after the other. Correct the compass bearings so that they will be either true or magnetic, according to the compass rose to be used in plotting them, applying compass error to obtain true bearings, and deviation only to obtain magnetic bearings.

By means of parallel rulers draw through the objects lines in the respective directions that each was observed to bear. As the vessel's position is known to be on each of these, it follows that it must be at the intersection. In Figure 12, if A and B are the objects and OA and OB are the lines passing through them in the observed directions, then the vessel's position is at O, their intersection. The solution of this problem is greatly facilitated by the use of Koch's Plotter, which is described with its uses at the end of this chapter.

If possible, objects selected for *cross bearings* should subtend an angle at the vessel of at least 30° and less than 150°. As the angles become smaller and greater than these limits, small errors of observation give larger errors in the results. Near objects are preferred to distant ones. When finding the "fix" by cross bearings, take the bearing of the object nearest ahead or astern first, as that object will change its bearing less during the interval between bearings than one more nearly abeam.

(3) To Get the Vessel's Position When More than Two Objects Are in Sight.

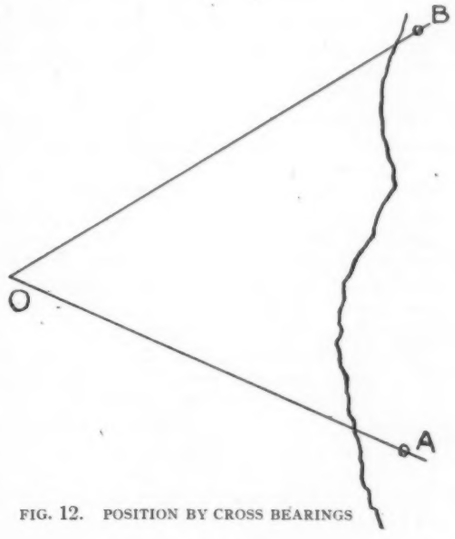


FIG. 12. POSITION BY CROSS BEARINGS

(a) *Cross Bearings.* The method of cross bearings on two objects has been explained above. If a third well charted object is in sight, its bearing should be taken and plotted in the same manner to be a check on the other two. If this line of bearing intersects at the same point, O in Figure 12, it verifies the accuracy of the "fix." If not it indicates an error, either in the observations, plotting, or the application of the compass error. Should the three bearings form only a very small triangle at their intersection, the center of this triangle may be taken as the vessel's position.

(b) *Three Point Problem.** This is the most accurate method of obtaining a fix. Three objects on the chart are selected and the angles between them are measured by a sextant. In lieu of a sextant the bearings of three objects may be taken and the angles between them may be computed therefrom. The position is plotted by a *Three Arm Protractor* (a description of this instrument is omitted because the Koch Plotter described later will perform all of its functions). To plot, given the angles, set the right and left angles on the instrument and then move it over the chart until the three bevel edges of the arms pass respectively and simultaneously through the three objects. The center of the instrument will then mark the fix, which may be marked by a pencil point through the center hole of the protractor.

(4) Danger Angles. When coasting the navigator will often desire to pass sunken rocks or dangerous shoals or sunken obstructions at a minimum distance. This is done by use of the *Danger Angle*, of which there are two kinds, horizontal and vertical. The former, which is preferable, is used when two chartered objects making a fair angle are available, and the latter when only one such object is available.

The Horizontal Danger Angle.† In Figure 13, suppose AMB a portion of the coast along which the vessel is coasting, on the course CD; A and B are two well charted objects; S and S′ are two outlying shoals or reefs that must be avoided. To pass outside the danger S′ proceed as follows: (the construction is shown in full lines) take the middle point of the danger S′ as a center, and with a radius equal to the distance from the danger that it is desired to pass, describe a circle (the small full circle). Now pass a circle (the large full circle) through A and B tangent to the small circle. Measure the angle AEB, set the sextant to this angle. Now since AB subtends the same angle at all points of the circle AEB it is apparent that as long as AB does not subtend an angle greater than AEB, the vessel will be outside the circle AEB, hence clear of the sanger S′.

To avoid the danger S, passing inside it, proceed in a similar manner as follows (construction in broken lines): Take the middle point of the danger S as a center, and with a radius equal to the distance it is desired to pass the danger, describe a circle (the small broken circle). Through

*This method is used extensively in marine surveying. It requires the use of a sextant and is of little value to motor boats.

†This requires the use of a sextant. The knowledge is unnecessary but is inserted for the use of the navigator who possesses a sextant.

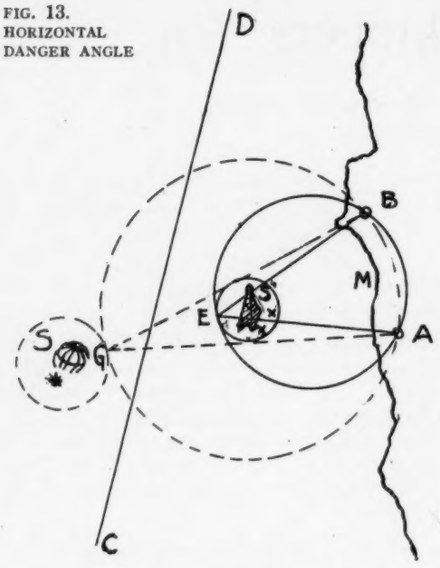


FIG. 13. HORIZONTAL DANGER ANGLE

A and B draw a circle tangent to the first circle (large broken circle). Measure the angle AGB with a protractor and set the sextant to this angle. Now as long as AB subtends an angle greater than AGB the vessel will pass inside the danger S. By combining the two methods, the ship will pass safely between the dangers as long as the angle subtended by AB is less than AEB and greater than AGB.

Vertical Danger Angle, Figure 14. This method is based on similar principles to the horizontal danger angle, the construction being a little different. An object of known height and distance, such as a lighthouse, is used. Lighthouses are measured from mean high water to center of lantern. Allow for stage of tide if there is much range. Draw the safe circle with S′ as a center. With the object as a center draw a second circle tangent to the outside of the first circle at E. Measure the distance AE on the chart. With the distance AE and the known height AB the angle AEB can be computed. Now as long as the angle subtended by AB is smaller than the angle AEB the vessel will pass safely outside of S′. By similar argument, as long as the angle subtended by AB is greater than AGB the vessel will pass safely inside the danger S.

DANGER BEARINGS are useful when coasting to warn a navigator by *one compass bearing* when the course is leading into danger. Suppose a vessel is steering a course, as shown in Figure 15, along a dangerous coast with an outlying reef as shown, with only the landmark A as a guide. Draw through A a line AX that will clear the danger all along. Note its direction by the compass rose. Take frequent bearings of A. As long as the bearings YA and ZA are to the right of XA the vessel is on the safe side of XA and clear of danger. If a bearing taken is to the left of XA the vessel must steer off shore.

Although the object in sight may be so nearly ahead as to be valueless for a definite fix, this method may be employed to keep the vessel out of danger.

RANGES. A range consists of two well charted objects in line that can be used as a navigational aid. Thus in the above problem, if another well charted object lies in the prolongation of AX as at B, Figure 15, the line XAB is called a range. It is unnecessary to take the bearings YA and ZA in this case, because as long as the rear object is seen to the left of A (called an "open range"), the vessel is safe. Ranges are used a great deal in river and harbor work.

The course to be steered is marked by two objects, which when kept in line indicate a safe course to steer. Sometimes a danger will lie on one side of the range with good water on the other. This constitutes in effect a danger bearing. When taking cross bearings for anchoring it may happen that one of the bearings will be on a range, which can be plotted directly on the chart without observing its direction. Anchoring on ranges in open harbors is a very common practice.

If in a strange locality, the navigator should observe and compare the compass bearings of all ranges with the bearings indicated on the chart in order to make certain of their identity.

ROUNDING AN OBJECT AT A GIVEN DISTANCE. To steer an arc course around a light and keep it at a given distance without the use of "fixes," *provided there is no current*, stand on the first course until the light is at the desired distance. Immediately bring the light abeam and steer this new course until the light is one-half point abaft the beam. Now change course until the light bears one-half point forward of the beam and steer this new course until the light bears one-half point abaft the beam again and repeat. By this method the vessel travels on a polygon, the inscribed circle of which has a radius of the desired distance. The number of sides of the polygon may be indefinitely increased, so that the light may be rounded by frequently changing the course just enough to keep the light abeam.

THE KOCH PLOTTER. Reference has been frequently made to this instrument and it is described here instead of in Chapter 2 because its use is peculiarly applicable to the problems here presented. It can perform all the functions of the compass rose, parallel rulers, three arm protractor, etc. By using this instrument all the above can be done away with. The writer has frequently used it and would not go to sea without one. It facilitates the solution of all piloting problems that involve bearings, angles, or courses. It is simple in construction as the following description indicates.

All materials except bolts and washers are transparent. There are two celluloid plates, one 7″ square plate with two series of lines perpendicular to each other, the lines of each series being about ½″ apart, the other a 7½″ circular disc, marked on tis circumference in degrees. These are centered on a hollow bolt of brass and can be clamped together with any degree of friction desired. Three arms are placed so as to revolve around the hollow bolt and can be clamped together in any position desired. The following are a few of the problems that can be solved by this ingenious instrument. (It should be noted that no parallel ruler, or other instrument, is used, and reference is not made to the compass rose on the chart.)

(1) *To set a given course from a given position.* Revolve the zero mark of the disc to the East or West of the True North and South line of the square an amount equal to the compass error. Set one arm to the desired compass course. Lay the plotter with its center at the given position. Revolve the plotter about this position as a center until a vertical line on the square coincides with a meridian, or a horizontal line with a parallel of latitude. The course now lays along the bevel edge of the set arm and can be drawn if desired.

(2) *To find the course between two positions.* Set the disc for compass error as before. Center the disc on one position and revolve it as before. When a vertical or horizontal line of the square is in coincidence as before, swing one arm so its bevel edge passes through the second object. Read off the course where this bevel edge cuts the degree marked disc.

(3) *To plot the position from two bearings.* Set the disc for compass error as in (1). Set the two arms to the two compass bearings on the disc. Clamp the arms. Manipulate the plotter on the chart so that the bevel edges of these two arms pass through the two observed objects and the vertical lines on the square are parallel to the meridians. With a pencil the desired position can be marked through the hollow central bolt. The third arm can now be swung to mark a new course or to get a desired compass course to any object.

(4) *To plot the position by three compass bearings or the angles between three objects.* In this case the lines on the square plate are *not* brought into parallelism with the meridians on the chart because the compass error is disregarded. Set the disc to zero on the reference line of the square card. Set the three arms to the compass bearings, by the degrees on the disc. When plotting

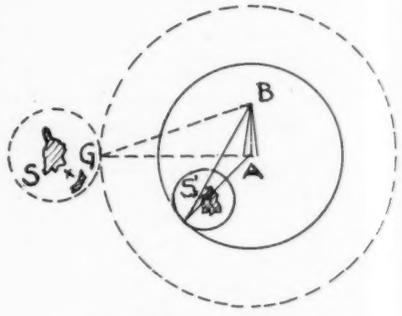


FIG. 14. VERTICAL DANGER ANGLE

by observed angles, set one arm at zero, the second arm by degrees on the disc at the left angle reading, and the third arm by degrees on the disc to a reading equal to the sum of both angles.

Having set the three arms by either of the above methods, manipulate the plotter on the chart until the bevel edges of the arms intersect the three objects on the chart, the center arm being on the center observed object. Mark the position by inserting a pencil in the hollow central bolt.

(5) *To get the compass error from the compass bearings on three objects.* Proceed as in (4). Set the arms to the compass bearings and get the position. With the disc set at zero on the reference line of the square the lines on the square will now be in parallelism with the meridians on the chart unless the compass error is zero. If not parallel, the compass error can be found as follows: Keep the disc in its position on the chart and revolve the square until its lines are parallel to the meridians of the chart. The angle that now shows between the reference line of the square and the zero of the disc is the compass error.

Many other problems can be solved as they arise. The principle of this plotter is the portable compass rose. When the square card has its lines parallel to a meridian or parallel of latitude, the disc is in effect a compass rose. By adjusting the disc to zero, deviation, or compass error, the compass rose indicates directions per compass, magnetic, or true, respectively. The instrument is a combination of compass rose, parallel rulers, and three arm protractor.

Correcting the Compass Course. When navigating by dead reckoning all courses are reduced to true courses. The method of correcting the compass course to obtain the true course is given in Chapter III.

The Compass error is the *algebraic* sum of the *deviation* and *variation*. If the compass error is *East*, apply it to the *right* of the *compass course* to get the true course; if *West*, apply it to the *left* of the *compass course* to get the true course. When applying this correction imagine that you stand in the center of the compass card. Some compasses are marked from 0° to 360°, while others are marked from 0° to 90° from the North and South to the East and West. Eight problems follow to illustrate compass correction. The first solution in each case is for a compass of the first type, the second solution (in parenthesis) for a compass marked in the second manner.

Prob. 1. Compass Course 75° (N75°E), Compass error +5° (5° E).
Find true course. Answer 80°. (N80°E).
Prob. 2. Compass Course 75° (N75°E), Compass error —5° (5°W).
Find true course. Answer 70°. (N70°E).
Prob. 3. Compass Course 150° (S30°E), Compass error + 10° (10°E).
Find true course. Answer 160°. (S20°E).
Prob. 4. Compass Course 150° (S30°E), Compass error — 10° (10°W).
Find true course. Answer 140°. (S40°E).
Prob. 5. Compass Course 220° (S40°W), Compass error + 4° (4°E).
Find true course. Answer 224°. (S44°W).
Prob. 6. Compass Course 220° (S40°W), Compass error —4° (4°W).
Find true course. Answer 216°. (S36°W).
Prob. 7. Compass Course 305° (N55°W), Compass error + 6° (6°E).
Find true course. Answer 311°. (N49°W).
Prob. 8. Compass Course 305° (N55°W), Compass error —6° (6°W).
Find true course. Answer 299°. (N61°W).

THE SAILINGS. When a vessel sails from one place to another on the earth's surface, the computations connected therewith involve five quantities, viz: the *Course*, the *Distance*, the *Difference of Latitude*, the *Departure*, and the *Difference of Longitude*. Solution of problems involving these quantities is called *Sailings*. There are many kinds of *Sailings* employed by navigators, of which the following is a list.

1. Plane Sailing.
2. Traverse Sailing.
3. Spherical Sailing.
4. Parallel Sailing.
5. Middle Latitude Sailing.
6. Mercator Sailing.
7. Great Circle Sailing.
8. Composite Sailing.

The last three will not be considered as they are used in cases where the distance sailed is very large, and do not come within the scope of this work. *Middle Latitude* sailing is the one most used in *Dead Reckoning*. An understanding of the first four, however, is necessary to an understanding of Middle Latitude sailing, and they are here discussed to lead up to Dead Reckoning. Although the problems of Dead Reckoning can be solved by trigonometry, in practice they are solved by the use of Tables 1 and 2 of Bowditch's Useful Tables.

The curved lines joining any two places on the earth's surface and cutting all meridians at the same angle is called the *Rhumb Line*. The constant angle which this line makes with the meridians is called the *Course*; the length of the line between any two places is called the *Distance*.

PLANE SAILING. For the moment, suppose the curvature of the earth is neglected. In Figure 17, T is the point of departure, T′ the point of destination, TT′ is the rhumb line. Draw Tn and T′n, forming a right angle. Tn is the meridian and T′n is the parallel of latitude. nTT′ is the course, being the angle the rhumb line makes with the meridian. TT′ is the distance (Dist.), being the length of the rhumb line. Tn is the difference of latitude (DL) and T′n is the departure (Dep). Then from the right triangle, TT′n, we have the following formulæ:

$$\text{Sin C} = \frac{\text{Dep}}{\text{Dist}}$$

$$\text{Cos C} = \frac{\text{DL}}{\text{Dist}}$$

$$\text{Tan C} = \frac{\text{Dep}}{\text{DL}}$$

By use of these equations all problems that arise in plane sailing can be solved, trigonometrically.

A much simpler method of working the sailings is by the use of Tables 1 and 2, Bowditch. These are commonly called the Traverse Tables. The tables are simply solutions of right triangles. Referring to any page of Tables 1 or 2, at the top (or bottom) of the page is the course or angle, C. The three quantities found on any one line are the three sides of the triangle, Distance, Latitude, and Departure. By entering this table with any two known

(*Continued on page 29*)

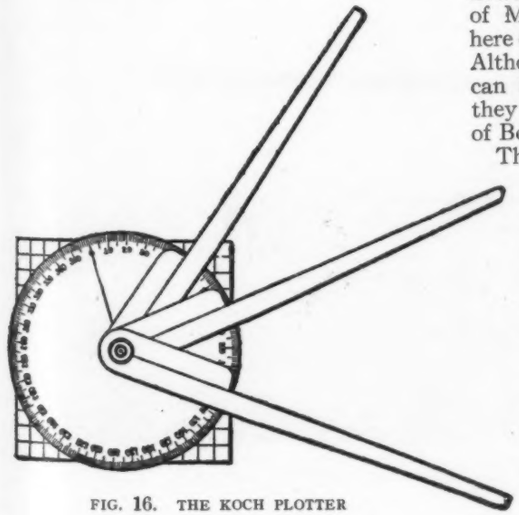
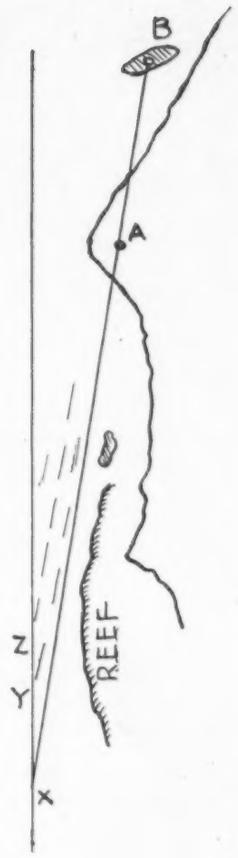


FIG. 16. THE KOCH PLOTTER

FIG. 15.
DANGER BEARING AND RANGE



Battle Wings of the Republic

What One of the Great Airplane Factories Is Doing To Win the War

AN airplane is more like a piano than like any other machine." Harry Bowers Mingle, president of the Standard Aircraft Corporation, made this comparison in his office at the corporation's new ninety-acre plant at Elizabeth one day last week. An airplane suggests a dragon fly manned by a demigod in a leather coat, while a piano is reminiscent of Chopin and shaded lamps, therefore the simile seemed decidedly odd. But as the company of which Mr. Mingle is head is one of the largest manufacturers of airplanes in the United States, it seemed probable that he knew whereof he spoke.

For the United States Government and for our allies the corporation is turning out an endless supply of airplanes each month under the supervision of the United States Aircraft Board and the Plane Producing section of the United States Signal Corps. The demands for more and more planes to wallop the Boche necessitated the purchase of the John Stephenson Car Works last August. This is now being operated in addition to the parent factory at Plainfield.

The young man who led the way to the assembling room explained that the company manufactures three general types of tractor biplanes—the preliminary training machines on which our budding aviators cut their teeth, literally sometimes as well as figuratively; battle planes and flying boats. He added that Charles H. Day now chief engineer for the Standard was the inventor of the tractor type of biplane, which has almost entirely superseded the pusher type.

The assembling room proved to be a great open room, filled with what appeared to be skeletons of giant fish, each on a low stand or bed. These skeletons are made of four light wooden strips, or longerons in airplane language, with wooden cross pieces or trusses. Each section is laced across with steel wires screwed into small steel plates or terminals.

"This is the fuselage or body of the airplane" explained the guide. "It corresponds to the chassis of an automobile. It can be lifted easily with one hand. Yet it is all that sustains the motor, the man and the wings.

Watching the man at work on the fuselage it was easy to understand that "an airplane is like a piano" for he was tightening up the wires with a key, for all the world as if he was tuning a Steinway Grand. These bracing wires are tested to withstand the severest strains. In the training machine, for example when a novice makes a bad landing, the machine will sometimes bounce twenty feet and if the wires were not capable of taking this stress from the wood there would be very little left of the machine. The Struts or upright pieces of wood in the framework of the airplanes are plumbed by means of an angle gauge and a leveling glass and the wires are then adjusted to obtain the proper tension until the fuselage is trued at all points, when a cord drawn from the center of the tail will pass through the center of every tie and meet the center point of the motor when installed. If it is a hairline out of plumb the machine might side-slip and make herself generally disagreeable.

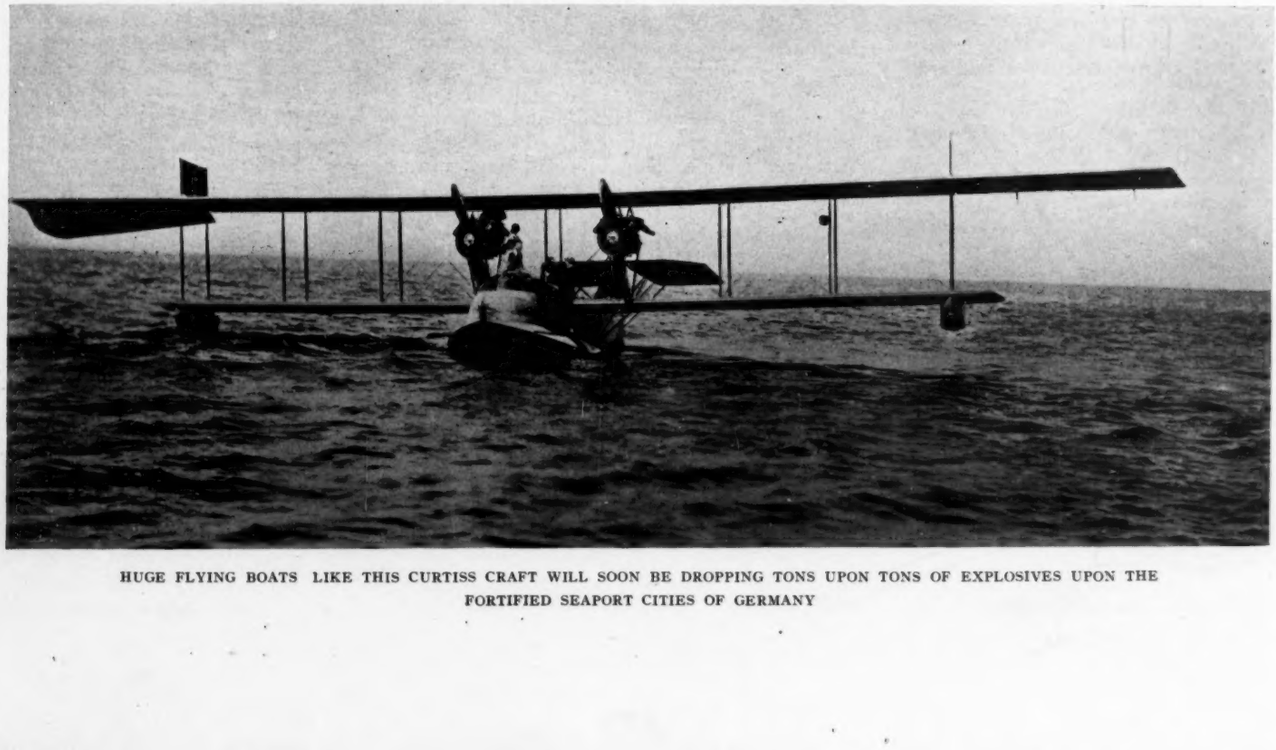
Spruce, ash, basswood and walnut may be used for the skeleton. Spruce is the best, as it is lightest in proportion to its tensile strength. Formerly the wood was air-dried for three years but air-dried wood is now so scarce that a special dry-kiln process is used which materially shortens the operation.

On the other side of the partition stood an airplane complete save for its wings and tail piece. From the wicked looking engine in its head to the tip of its tail there was not a sliver to mar the perfection of the streamline. It had more the appearance of a lean man-eating shark than a creature of the air.

The varnish cover of the fuselage, tense as a drum head, vibrated hollowly to the touch. Save for the aluminum cowl over the engine, this cover of Irish linen chemically treated or doped with a compound of ether and gun cotton is the single coating which transforms the skeletons of the fuselage into the body of a bird.

The machine was of the training type, with two seats, the instructor's in front the student pilot's behind.

The propeller is a thing of beauty, so wonderfully polished is the dark walnut of which it is made. In the tractor type it is placed in front, where it is more efficient. It is made of five to nine layers of wood, laminated or glued together, cut down and polished. This process gives it tremendous strength. Each end is tipped with aluminum to keep the wood from fraying. The minimum number of revolutions is 2,400 per minute. In the one-place battle planes, where the pilot acts as gunner, the machine gun is synchronized to fire forward between the revolutions of the propeller. As the gun is stationary, the gunner aims by deflecting his machine.



HUGE FLYING BOATS LIKE THIS CURTISS CRAFT WILL SOON BE DROPPING TONS UPON TONS OF EXPLOSIVES UPON THE FORTIFIED SEAPORT CITIES OF GERMANY

The tool box in an airplane is under the seat, so that in case of trouble the versatile pilot steers with his knee while making necessary repairs. The seat cushion by the way is stuffed with a cotton-like fibre named kapoc, which converts itself into a life preserver.

"Is there much difference between an airplane engine and that of an automobile?" the guide was asked.

He smiled. "Well, one difference is in the price. You can get a mighty good automobile, complete with a lot of upholstery, for $5,000—the price of the average airplane engine.

Naval officers and jackies were everywhere about the plant. Many wore the peculiar hunter's green of the Naval Aviator Corps. There were also many army men, but they were not in uniform.

Eight tall, white guard houses surround the plant. Uncle Sam isn't taking any chances with German spies. Every employee, even the president, must show his pass button to the guard upon entering or leaving. All others who desire to go into the plant must have a special pass which is surrendered to the guards when leaving.

The aviators who wheel aloft to harry the Hun are thrilling figures. But the men and women in the shops who fashion their patriotism into sturdy bits of wood and wire, will play an equal part with their more spectacular brothers in accomplishing the final victory.

The Ships We Are Building and Will Build

EXCERPTS from an address by Edward N. Hurley, chairman of the United States shipping board, at the commencement exercises of the University of Notre Dame, South Bend, Indiana, June 10, 1918: giving the present tonnage figures in the shipping program; disclosing the probable uses to which the vast fleet now building will be put after the war; some hitherto unpublished data regarding Germany's recognition of her own weakness and the methods by which world peace can be maintained under American leadership.

"Now we are beginning to fulfill our destiny. On the 1st of June, of this year, we had increased the American-built tonnage to over 3,500,000 deadweight tons of shipping. In the eleven months from July 1, 1917, to June 1, 1918, we constructed in American shipyards a tonnage equal to the total output of American yards during the entire previous four years. In short, the Shipping Board has added approximately 1,000,000 tons of new construction to American Shipping in the last ten months,

Royal North of Ireland Yacht Club.

ROLL OF HONOUR.

TOTAL 136.

Adeley, W. L., Captain
Agnew, W. L., 2nd Lieutenant
Arnold, W., Captain
Arnold, A. E., 2nd Lieutenant, M.C.
Astley, W., Corporal
Bailey, John, Lieutenant
Bangor, Viscount, Major
Boucher, M., Lieutenant
Bradley, S. Glenholme, Lieut.-Col., D.S.O., M.C.
*Brown, T. C., 2nd Lieutenant
Brown, G. B., Lieutenant
Brown, G. A., 2nd Lieutenant
Brown, H., Sub-Lieutenant, R.N.M.B.R.
Bryce, George, Sub-Lieutenant R.N.M.B.R.
*Carson, R., Major
*Cook, C. E., Lieutenant
Craig, Sir James, Bart., M.P., Lieutenant-Colonel
Craig, Edwin, Lieutenant
*Craig, J. A. F., 2nd Lieutenant
*Darnell, C. V., Lieutenant R.F.C.
*Davidson, J. S., Captain
Denny, Anthony, Major R.G.A.
Donaldson, H. C., 2nd Lieutenant
Dunville, John D., Wing Com. R.N.A.S.
Easton, Walter, Lieut. R.N.V.R
Erskine, J., Lieutenant, D.C.M
Eyers, A., Lieut.-Com., D.S.O
Evan, F. S., Motor Driver R.N.A.S.
Fergusson, J. D. C., Lieutenant R.N.M.B.R.
Forbes, R., Captain
Forbes, M., Captain
*Forbes, J. D., 2nd Lieutenant
Gaffikin, P., Major, M.C.
Gaffikin, R., Ambulance Driver
Galway, W. R., Captain
Gray, C. E., Lieutenant
Green, A., Lieutenant
Greeves, John, Ambulance Driver
Greeves, W. E., Ambulance Driver
Gribben, E., Captain, R.F.C., M.C.
*Hamilton, A. H., Captain
Hardy, Savile C., Ambulance Driver
Hardy, B., Lieutenant
Henderson, R. L., Captain
Henry, Robin, Lieutenant
Herrick, Major
Herdman, A. C., Captain
Heron, John, Captain, M.C.
Heyn, F. M., Red Cross Driver
Heyn, R. G., Captain R.F.C.
*Hollywood, James, 2nd Lieutenant
Houston, C. Blakiston, Major
Hudson, J. H., Major
Hume, G. C., Captain
Inglis, J. M.
Irvine, T. G. C., Major
*Jenks, J., Captain
Johns, Tyndal, Captain
Johnston, Ivan, 2nd Lieutenant
Joy, Bruce, Lieutenant
Kemp, Walter, Major, D.S.O.
Kemp, W., Lieutenant R.N.F.C.
Kemp, J. W. L., Lieutenant
Kemp, Captain
*Kertland, E. H., 2nd Lieutenant
King, G. G., Lieutenant
*King, F. C., 2nd Lieutenant
Knox, S. W., Captain
*Lemon, A. D., jun., Lieutenant
Lemon, J. W., Lieutenant
Lepper, R. M., Lieutenant R.N.
Lepper, A. W.
*Letts, B. C., Captain
Lindsay, D. C., Captain
Little, R. P., Major
Lowe, A. T., Major
Lyttle, J. H., 2nd Lieutenant
MacIlwaine, J. M., Captain R.F.C.
MacIlwaine, J. E., Captain
Mace, J. H., Motor Driver
Mackenzie, W., Captain
Macoun, James, Captain
Malcolm, H. P., Lieutenant
Mann, R., 2nd Lieutenant
Marshall, E. L., Captain, M.C.
Maxton, L. G., Sub-Lieutenant R.N.A.S.
Megaw, W.
Mitchell, J. R., Captain
Mitchell, W. C., Captain
Moore, R. M., Staff Captain, M.C.
Montgomery, W. A., Major, D.S.O.
Montgomery, A. C.
Morton, E. A., Lieutenant
Morton, T., Captain
*Morton, W. J. E., Lieutenant
*M'Cammon, T. V. F., Lieutenant-Colonel
M'Connell, J. D., Lieutenant
M'Connell, R. J., jun., Lieutenant
M'Corry, J. P. S., 2nd Lieutenant
M'Causland, Ivan E., 2nd Lieutenant
M'Cammond, W. E. C., Lieutenant-Colonel
M'Creedy, W., Captain
M'Ildowie, G., jun., Captain
M'Ildowie, J. D., 2nd Lieutenant
*M'Knack, L. H., 2nd Lieutenant
M'Laughlin, W., Captain
M'Mullan, R. W., 2nd Lieutenant
*Neill, J. D., Lieutenant
*Neill, R. L., Lieutenant
*Neill, Rex., 2nd Lieutenant
Nelson, J. G., 2nd Lieutenant
Orr, Sydney, Corporal
Patterson, Hartley
Pollock, J. A., Lieutenant R.N.M.B.R.
*Porter, Leslie, Captain R.F.C.
Praeger, E., Sub-Lieutenant
Purdon, W. B., Lieutenant-Colonel, D.S.O., M.C.
Purdon, J. R., 2nd Lieutenant
*Quarry, H., 2nd Lieutenant
Robb, F., 2nd Lieutenant
Rogers, J. A., Lieutenant
*Ross, Melbourne, 2nd Lieutenant
Ross, H., 2nd Lieutenant
*Ross, K., 2nd Lieutenant
Ross, Watson
Sharman-Crawford, R. G., M.P., Colonel
Shaftesbury, Earl of, K.P., Brigadier-General
Small, F., Sub-Lieutenant
*Smiles, Allan, Captain
Smiles, W. D., Major
Thompson, Joseph
Tinsley, J. C., 2nd Lieutenant
*Turnbull, A. M., 2nd Lieutenant
*Uprichard, H. A., Major
Uprichard, E. L., 2nd Lieutenant
*Vince, P. H. I., Sub-Lieutenant R.N
Waddell, R. B., Lieutenant
Waite, B. R., Captain, M.C.
Walkington, C., Captain
Warnock, J. E., 2nd Lieutenant
Webb, R. R., 2nd Lieutenant
Wetherby, Major
Wilkinson, R. W., 2nd Lieutenant
*Wilkinson, D. S., Lieutenant R.F.C.
Wilson, Hugh, Captain R.A.M.C.
Wilson, D., Lieutenant
Wilson, J. O., Lieutenant
Wolf-Smyth, A., Commander R.N.R.
Workman, R., Major
*Workmen, E., Lieutenant, M.C.
Workman, A. C., Captain R.F.C.
Young, J. R., Captain

CLUB STEWARD.
*G. Bonner, Corporal

*Killed or Died. Please notify additions or alterations from time to time. April, 1918.

FROM THE HONOR ROLL OF THE ROYAL NORTH OF IRELAND YACHT CLUB, AMERICAN YACHT-CLUB MEN MAY LEARN OF A FITTING WAY TO COMPILE THE NAMES OF MEMBERS IN SERVICE

for it was not until August 3rd of last year that our commandeering order went into effect. We have also added 118 German and Austrian vessels, with a total deadweight tonnage of 730,176. We have requisitioned from the Dutch under the order of the President, 86 vessels with a total deadweight tonnage of 526,532. In addition we have chartered from neutral countries 215 vessels with an aggregate deadweight tonnage of 953,661. This tonnage, together with the vessels which we have been obliged to leave in the coastwise and Great Lakes trade, gives us a total of more than 1400 ships with an approximate total deadweight tonnage of 7,000,000 tons now under the control of the United States Shipping Board.

"Now, in the year ending July 1, 1915, the shipyards in this country built 186,700 deadweight tons of steel vessels of over 1500 deadweight tons. Thus, in the month of May we produced 53,000 tons more than were produced in the entire year 1915. During the year ending July 1, 1916, 281,400 deadweight tons of steel vessels were delivered. Adding the 1915 tonnage with the 1916 tonnage gives a total of 468,100 tons. With a tonnage for the first five months of this year of 805,000 tons, we delivered in five months 336,900 tons of shipping more than was built in American shipyards in the years 1915 and 1916. I do not believe I am over optimistic in saying that our tonnage output will continue to increase until before this year closes we will be turning out a half million tons each month.

"As I have said, we have a total of 819 shipways in the United States. Of these 819, a total of 751, all of which except 90 are completed, are being utilized by the Emergency Fleet Corporation for the building of American merchant ships.

"In 1919 the average tonnage of steel, wood and concrete ships continuously building on each way should be about 6000 tons. If we are using 751 ways on cargo ships, and can average three ships a year per way we should turn out in one year 13,518,000 tons, which is more than has been turned out by Great Britain in any five years of her history."

War Time Regulations for Those Who Sail

GET a Navy Department Permit from the Commandant of your Naval District (if you obtained a permit in 1917, you will not be required to obtain another) and carry it aboard at all times. Apply at Room 303, No. 280 Broadway, New York, or at the Headquarters of the Section in which you live.

If the waters you sail are in a War Zone every boat owner must have and carry a WAR ZONE PERMIT which may be obtained at the Custom House. Provide yourself with your photograph (passport size) before you apply. Permit is required for owner only. He becomes responsible for his guests.

Failure to carry a license for navigating District waters will render a vessel liable to detention and to being sent to the nearest port for examination, and for further action if found necessary.

Licenses given by commandants of one district will be accepted in other districts. No additional license will be required of a boat owner navigating in a district other than the one for which licensed, unless the boat is to remain in the new district.

Have on board the receipt showing that the war tax on your boat has been paid.

Be sure you can prove (if called upon to do so) that you have no alien enemies aboard.

If you wish to go out to sea, get a special permit from the naval headquarters of your Section.

Have full equipment aboard as required by law.

Keep away from waters where naval operations are in progress and obey the orders of the Sectional Patrol boats (marked "S P" on the bow) if they signal to you to come alongside.

The Popular Evinrude Motor

THE Evinrude Motor Company, Milwaukee, Wisconsin announces the temporary discontinuance of it's 4 H. P. 2-cylinder opposed Evinrude Detachable Rowboat Motor on account of unusually large export orders, incidental government work and the increased popularity of the 2 H. P. Evinrude Motor.

Some interesting changes and improvements will be developed in the motor while it is out of the field and it is intended to have a remarkable unit when it is again placed on the market after the war.

The 2 H. P. single cylinder Evinrude motor which has proven so popular is being equipped with a balanced flywheel; all moving parts have been so arranged that they reciprocate almost perfectly so all jarring or vibration has been successfully eliminated. This motor has reached a truly interesting stage of efficiency. The motor will run under load for four hours on one gallon of gasoline which means a distance of from twenty-five to thirty miles.

To Raise Torpedoed Ships

SALVAGE experts are working on the problem of raising the Lusitania from the 300 foot depth of water she lies in off the Old Head of Kinsale, Ireland. At all events, an attempt will be made to recover the treasure from the strong room on one of the upper decks. The possibility of beaching the vessel on the Irish Coast is also being considered. Some of the keenest engineering minds of Great Britain are devising plans and means of raising torpedoed vessels after the war. Many of these ships lying on the ocean floor off Ireland are in water shallow enough to make the work feasible. English salvage companies are planning to raise many ships and cargoes after the war, especially the lesser damaged vessels, and these with little trouble.

Recent Yacht Sales

CONSIDERABLE activity is reported in the transfer of yachts despite existing conditions,—quite a number having been sold and converted for certain commercial purposes. Among transactions recently effected by Cox & Stevens of New York are the following:

The 124-ft. twin-screw cruising power yacht *Lady Betty*, sold for Walter Lippincott of Philadelphia to A. H. Erickson of New York, who contemplates one or more cruises to Bermuda.

The 136-ft. seagoing auxiliary ketch *Finback*, sold for C. H. W. Foster of Boston to a firm of Importers of New York City. The vessel will be converted for the purpose of transporting iced fish from Newfoundland to American North Atlantic ports, and will have a refrigerating plant installed.

The 99-ft. twin-screw cruising power yacht *North Wind*, sold for Charles Martin Clark, New York Yacht Club, to W. Gordon McCabe, Jr., of Charleston, S. C. for general cruising on the Atlantic Coast and inland waters.

The 117-ft. steam yacht *Inca*, sold for Edgar F. Luckenbach, Atlantic Yacht Club, to Lufkin & Tarr of Gloucester, Mass., and will be converted for fishing service.

The 90-ft. twin-screw gasoline houseboat *Bolo*, chartered for A. Felix duPont of Wilmington, Del., to S. H. Shonnard of New York for the latter part of Winter season in Florida waters.

The 85-ft. gasoline houseboat *Altamaha*, chartered for McCoy Brothers of Daytona, Fla., to C. G. Dixon for the full Winter season in Florida waters.

The 75-ft. twin-screw power yacht *Josephine*, chartered for A. H. Bromell of New York to George Lauder Carnegie for service in Southern waters.

The 73-ft. twin-screw cruising power yacht *Marold*, sold for H. S. A. Stewart of Pittsburgh, Pa., to Walter J. Hill of New York. Boat will be renamed *Wacouta*, and after alterations are made will go to Florida waters next Fall.

The 70-ft. twin-screw express power yacht *Joy*, chartered for Commodore William H. Childs, Indian Harbor Yacht Club, to a prominent member of the New York Yacht Club, for use as a ferry during the Summer season between his Summer home and New York City.

The 75-ft. twin-screw raised deck cruiser *Kanawha*, sold for H. C. Baxter of Brunswick, Me., to H. C. Stewart for general cruising on Chesapeake Bay and adjacent waters.

The 67-ft. gasoline cruiser *Peg-O-My-Heart*, sold for Wilbur C. Walker of Hartford, Conn., to Gardner B. Williams of Boston, Mass., for service on Massachusetts Bay and adjacent waters.

May 11, 1918.

The International Life Suit Corporation,
11 Broadway, New York City, New York.
Gentlemen:

Have just returned to ——— from Europe, on the R. M. S. Orduna and would ask that you forward me as soon as possible another suitcase for my life suit—the original case was lost on the S. S. Aurania when she was torpedoed last February.

You will no doubt be interested to know something of my experience and, briefly stated, it is as follows:

The first time I was torpedoed I had made up my mind to purchase one of your life suits as soon as I got to New York, and, as you know, I purchased one from you.

On the afternoon of February 4th, 1918, at about five-twenty, while only twenty or thirty miles from the English coast we were attacked and torpedoed. We all realized that the ship was doomed as she began to list heavily to starboard, and there was much excitement.

* * * * * *

My duties were to see every passenger safely in their life boats and give all assistance possible. It was impossible to launch the port life boats, owing to the list but the starboard boats were finally launched and every one accounted for—when I started for my life suit which I had kept in a convenient place on deck. I slipped the suit on in a very few seconds and made my way to the boats—they had all been lowered and there was nothing left for me to do but jump—a distance of some thirty feet—I had never tried your suit before and I was greatly surprised at the ease with which I rode the sea—which was running high and very choppy.

I made my way toward a life boat and was soon picked up—several persons were drowned in one of the life boats or washed overboard by the action of the sea, and several boats had become so waterlogged that passengers were wet and miserable.

* * * * * *

We were all picked up by a trawler some hours later—and as no quarters were available I slept and lived in my suit for two days and nights in order to keep warm.

There were several other suits on board and I have since recommended them to all of my friends, many of whom have already bought Ever-Warm Safety-Suits.

Very truly,
(Signed) E. R. LEAK,
2nd Steward R. M. S. Orduna.

The 60-ft. twin-screw express cruiser *Chaco*, sold for Peter G. Thomson, Jr., of Hamilton, Ohio, to Norman Devaux of Oakland, Cal. She will be shipped to the Pacific Coast to be used there during the present season.

The 60-ft. cruising power yacht *Usona*, sold for N. E. Boomhower, Columbia Yacht Club, to Henry Whiton, New York Yacht Club, for service on Long Island Sound.

The 60-ft. high speed day cruiser *Aura*, sold for Alfred H. Morris, New York Yacht Club, to F. D. M. Strachan, New York Yacht Club.

The 53-ft. overall auxiliary schooner yacht *Virginia*, sold for John A. Royall of Beaufort, N. C. to Daniel H. Grandin for use on Lake Chautauqua, N. Y.

The 73-ft. houseboat *Ibis*, chartered for John Gully Cole to Mrs. F. B. Warren for the Summer season for use on Long Island Sounb.

The 70-ft. steam yacht *Vega*, sold for Major A. G. Pendleton, U. S. A., to L. J. Dirig for fishing service.

The 80-ft. steam yacht *Albatross*, sold for the New England Iron & Metal Co. to a New York firm and will be converted for fishing purposes.

The 94-ft. gasoline yacht *Maysie*, sold for M. C. Schweinert of Brooklyn, N. Y. to the Ionian Company, Inc.

The 65-ft. gasoline houseboat *Seminole Queen*, chartered for Robert Busby to a prominent Philadelphia yachtsman.

The 55-ft. express day cruiser *Pronto*, sold for William Thaw, New York Yacht Club, to a prominent New York yachtsman.

The 48-ft. fast bridge deck cruiser *Banshee*, sold for Henry L. Maxwell, New York Yacht Club, to F. L. Jenckes for use on Narragansett Bay.

The 65-ft. overall auxiliary schooner *Uncas*, sold for Frederick R. Thorns of New York to Earnest Johnson of City Island, N. Y.

The 50-ft. gasoline cruiser *Parrakeet*, sold for C. Andrade, Jr., Larchmont Yacht Club, to M. D. Whitman for use on the South shore of Long Island.

The 54-ft. bridge deck cruiser *Queen Mab*, sold for William Foggitt of New York, to a well-known New York firm for shipment to Mexico to be used in connection with their oil refineries.

The 52-ft. bridge deck cruiser *Mon Reve*, sold for C. H. Layton, Columbia Yacht Club, to R. S. Christian, Jr., for use on Chesapeake Bay and James River. Boat has been renamed *Lilly C.*

The 43-ft. high speed bridge deck cruiser *Blue Coat*, sold for A. D. Brixey of New York to a member of the New York Yacht Club.

The 50-ft. bridge deck cruiser *Vincent*, sold for W. H. Yule of New Rochelle, N. Y. to interests in New London, Conn., where she will be placed in passenger service.

The 65-ft. gasoline cruiser *Lady Hilda III*, sold for Alexander Simpson of New York to the Shipley Construction and Supply Co.

The 37-ft. high speed cruiser *Flyaway III*, sold for Estate of F. L. Upjohn of Huntington, L. I. to F. W. Ruddock of New York.

The 40-ft. fast V-bottom cruiser *Flashlight*, sold for T. S. Hathaway of New Bedford, Mass., to I. B. Merriman of Providence, R. I.

The Class "Q" sloop yacht *Virginia*, sold for R. B. Budd of New York to L. G. Northrup of Buffalo, N. Y. for use on Lake Erie.

The 43-ft. bridge deck cruiser *Nandi*, sold for Edward Butler of New York to Dr. Thomas L. Bennett of New York for use in Eastern waters.

The 30-ft. auto boat *Rat*, sold for John J. Harty of Kingston, Ontario, to J. C. Washington of Havana, Cuba. The *Rat* was winner of the Herald Trophy at Thousand Islands during the season of 1917 and has been shipped to her new home waters.

The 55 ft. gasoline cruiser *Lizzie L.*, sold for Alexander Simpson of New York to the New York & Cuba Mail Steamship Co. for service in Mexico.

The 30-ft. cabin cruiser *Bohemia*, sold for Alexander Simpson to Oscar W. Kress of New York.

The 32-ft. raised deck cruiser *Fandango*, sold for E. W. Marshall to Alfred C. Thompson of Baltimore for use in Florida waters.

The 36-ft. motor cutter *Ohio*, sold for A. Simpson of New York to Armour & Co. of New York.

HERE'S a chance to enroll in the United States Naval Reserve Force and work at your own trade.

The naval aviation section needs a great number of men immediately. Good ratings and good pay are possible for qualified men. Here is the list of ratings and the Necessary Trades.

MACHINISTS' MATES—General machinists, automobile mechanics and assemblers, toolmakers, diemakers, and similar mechanical trades.

QUARTERMASTERS—Cutters and cloth fitters, upholsterers, canvas workers, painters, tent riggers.

CARPENTERS' MATES—Woodworkers of all kinds.

BLACKSMITHS—Toolsmiths, forge men, furnace men, etc.

COPPERSMITHS—SHIPFITTERS and all kinds of sheet metal workers.

Applicants must be American citizens from 18 to 35 years of age. Draft registrants will be accepted upon presentation of a letter from their local boards.

Men of the foregoing trades will be sent to school for special training. Applicants may enroll at 51 Chambers Street, New York, or at any Naval Recruiting Station in the United States.

There you are. Now sign up and help the Navy Airboats get the U-Boats.

The Sailor's Magazine

THE Sailors' Magazine is an attractively printed and illustrated monthly magazine published to extend by printed page the influence of the Seamen's Church Institute—an organization founded for the sole purpose of providing the comforts and advantages of home for the men who sail the seas. As a sailor's life is so filled with danger and hardship, and spending but a comparatively little time ashore, his inexperience when on leave is often shamelessly taken advantage of and he is waylaid by landsharks who pitilessly rob him of purse and everything he possesses. The sailor has many faults to be sure, but before the twelve-story home of the Institute was built, Jack never had a square deal—an opportunity to enjoy the advantages of a clean and wholesome environment. The Seamen's Church Institute is now the headquarters for more than five thousand men in the merchant marine and in the *Sailors' Magazine* the man who follows the sea finds much entertainment and useful information. In the issues for the years 1916 and 1917, stoutly bound in half-leather, there are many stories, informative articles, poems and illustrations. A limited number of the bound volume may be obtained from the publishers, The Sailors' Magazine at 76 Wall Street, New York.

The Standardized Ship

WE have heard a great deal of late in regard to the standardized ship. In the generally accepted sense of the term this means a fabricated hull on standard lines which will permit of duplication of framing and all bracket, gusset, and flanging work. The possible saving that may be secured in the construction cost of a hull by this method may be considerable, and, on the other hand, it may not turn o ut such a factor as is looked for by the advocates of ship manufacturing as opposed to shipbuilding.

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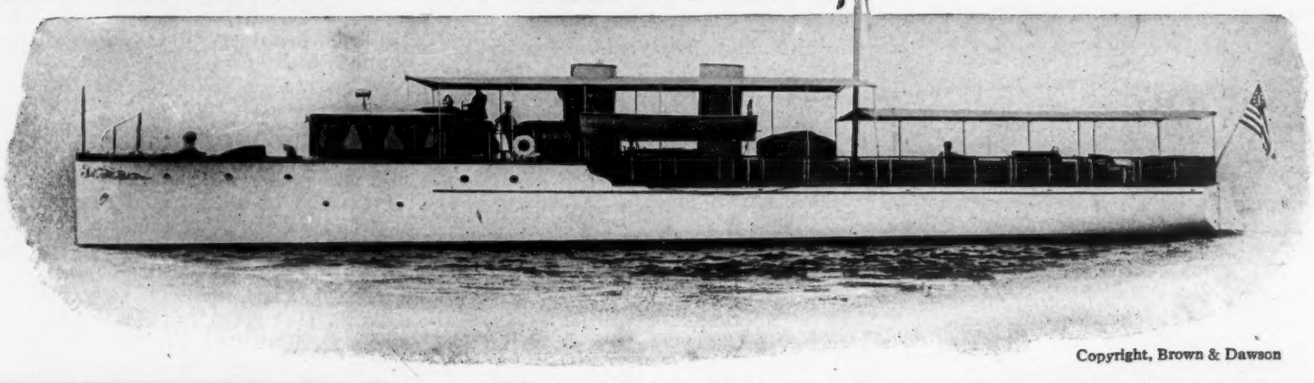

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Aurore, a 96-Footer, built by us for Mr. Stuart Wyeth.

It seems to be true of all industries that a gain in one direction is usually accompanied by a loss in another, and shipbuilding will be found no exception to the rule. The loss in the case of the ship, however, is one that can hardly be measured in terms of dollars and cents. The universal acceptance of the standardized ship would sound the death knell of an art.

From time immemorial the ship has been referred to as "she." The ship has possessed a personality. She has been a creature of foibles. She has carried and accentuated the peculiarities of her designer and also of her builder, and for this reason has always commanded a greater share of human interest than any other commercial product of man's brain and handiwork. The shipowner and the shipbuilder have always held pet theories in regard to what was most proper and fitting for a ship, and thus the owner has always incorporated a part of himself in the structure through the medium of ideas, and the builder's personality is always present in some distinctive phase of the design or workmanship. Can we afford to lay aside all incentive for individual design and place each type of ship on a dull, lifeless level? Shall we replace the art of shipbuilding with the business of ship manufacturing?

In Great Britain the ship has always been regarded as an object possessing personality, and it has been this personality that has created and held the intense interest of the British people in their merchant marine and in thier navy. If the United States is to permanently hold the important place on the sea which she is now assuming, we must maintain and foster the interest of our people in ships, and in order to do this our ships must be live things. Each ship must be distinctive, real, and vibrating with its own special message of the sea. The standardized ship is a corpse and our people will never enthuse over a great fleet of corpses.

Evinrude Men in The Service

THUS far a total of twelve men out of the force of the Evinrude Motor Company have joined the colors. Some of this number have left the Company to engage in special kinds of work, indirectly concerned in the winning of the war and are now being employed by concerns manufacturing guns, trucks, etc.

Of particular interest to yachting fans, will be the information that Mr. Osmyn A. Dole, formerly sales manager, who also had charge of the advertising is now in the Naval Reserve with the rank of Ensign. He holds the position of assistant paymaster.

Mr. Thomas Cahill, formerly in charge of the Evinrude service department, is now in the Ordnance Department of the Government.

The Junior Naval Reserve and Its Activities

(*Continued from page* 11)

including Mr. C. Oliver Iselin, Mr. Nelson Macy, who was made secretary of the committee, and Commodore W. W. Howe of the American Yacht Club, who was chosen chairman. Since the meeting, at the invitation of Mr. Macy, various clubs around New York and New Jersey have appointed local committees to interest their members in taking the Junior Naval Reserves on practise cruises. Among the clubs that have been most active so far in the patriotic undertaking are the Larchmont Yacht Club, the Indian Harbor Club of Greenwich, the American Yacht Club of Rye, and the Orienta Yacht Club of Mamaroneck. The chairman of the Orienta is Mr. Joseph Bister of 920 Broadway, and his associates are Commodore Swepson J. Brooks, William Samuel Johnson and James Lawrence. This club has completed arrangements to take care of thirty cadets a week, beginning July 1.

Mr. Leavitt has personally applied for three cadets for his yacht and Mr. Samuel Thorne, Jr., has requested two young sailors for his sloop. The personal applications of other boat-owners are pending.

Mr. Christopher Hannevig, a yacht broker of Glen Cove, has also offered the use of his famous racing yacht, the Exen, to train Junior Naval Reserves on this summer. The Exen, formerly the Germania, is the yacht that beat the Kaiser's Meteor.

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Black, White and Yellow
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The largest dealer in town carries this in stock; if not, he should. Tell him to write us for the agency. AGENTS WANTED EVERYWHERE. For sale by all Yacht, Boat and Canoe Supply Houses, Hardware and Sporting Goods Dealers. Send for booklets—"Marine Glue, What to Use and How to Use It" and "How to Make Your Boat Leakproof"

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SPAR COATING
withstands weather exposure best. It is made for spars, open decks, etc.

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Will you acquire these by being cooped up indoors?

Get into the Game! You owe it to Uncle Sam

Could you live on the country —if you had to?

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Can you hike thirty miles a day with fifty pounds on your back?

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But most important of all—You should be physically fit

This is your war whether you are serving at the front, in the office or in the factory.

Did you know that troops preparing in Canada for service over seas play games as part of their training?

Life out of doors will help you.

You owe it to yourself

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The Second Chance

(*Continued from page 22*)

out here in the midst of the roar and rage of the waters, the crashing of the thunder and the fire of the lightning. Death was not a hard thing to face. Not it. He had never thought that he would feel as he felt now when he was meeting it.

"Good-bye, Jones," said the captain.

"Good-bye, captain."

"You threw the belt away," said the captain. "There was only one aboard the old hooker. My fault Jones. My fault. Good-bye."

"Good-bye, captain."

Jones looked around. Karl had left his position at the mainmast. At the moment he was trying to get the hatch from off the hatchway. It would be something to hold on to, something that would help to keep him up when the end came. Jones watched him curiously. He began to wonder if he would be able to get the hatch off. It seemed to fit rather tightly. Would he be able to get it off?

That question was destined not to be answered for Karl in this world, for a sea came on him and took him overboard.

It was the beginning of the end. Another sea came and struck the schooner—and then another. Before she could recover another thundered upon her. She was smashed and beaten down under the waters.

She had foundered.

* * * * *

Jones opened his eyes. He had gone down with the schooner. Everything here was still quiet and strangely green. It was hard to believe that a furious storm was raging but a few fathoms above.

He felt himself going up slowly. Though he needed air, his mind was balanced and cool. Yes, he needed air—but he knew that he would not need it for long. He would never be able to live in the storm!

He had come up now in the midst of the rage and surge of the water. And he managed to get breath as he had managed to get it when he had been flung overboard through the breaking away of the jib-traveller. Just a little of it, and no more. He was beaten under. And beaten under again.

It was hard to have to die like this. It was hard to be choked for the want of a little air. He felt no exaltation in the idea of death now. He wanted to live.

When next he got a chance for breath he tried to keep himself up. Tried with all the skill that was in him. But he had no chance. He would have had more chance of managing to live in the midst of a hurricane out in the Atlantic. For there, in the immense waves, there would have been regularity. Here there was none. The sea just boiled under the lash and the strike of the wind. A swimmer had no chance.

Again he got breath. He struck out madly, and—— His hand had struck something! He knew not what it was, but he fastened on to it with a death-grip. What could it be?

It was the life-belt—the life-belt that he had heaved out to the man who had been carried overboard! It was not to be believed—but it was so.

Chance had favored him a second time! He was saved!

He was filled with joy. He could manage, for the water was not cold. He could live through it.

The roaring water beat him and struck and thundered upon him. But he cared not for its anger now. Beautiful visions of the life to come appeared before him. He would go back home to the island far away. He would go out to it across the wide ocean in a ship. Never again would he wander forth.

The dreadful, angry voices roared around him.

"You have beaten us. You are not ours. You have beaten us," they seemed to cry as they struck him. "Go! Go back to your life!"

He was dashed up like a feather, and he got a sudden glimpse of the shore off in the distance. How beautiful it looked! A strange, green, firm place.

Again a wave carried him up. Yes, yonder was the shore. And behold! upon it was the shine of the sun! The power of the storm was being broken.

He was being swept towards the shore. He could see it plainly now. He could see houses and farms out in the distance of it. He was saved.

On and on he was carried towards it. On and on.

At last there came a mighty wave that gripped him, and hurled him under. He was now all but on the shore.

Suddenly his feet touched the sand. But he was drawn back and hurled forward again. This time he managed to get his footing, and he broke from out the clutch of the wave.

He was ashore! He was free!

He staggered forward till he got from out the reach of the waves, and then he threw himself down to rest for awhile.

Reprinted by arrangement with Yachting Monthly.

The Motor-boat's Tender

(*Continued from page 13*)

in aimless circles, first to the end of her painter, then scraping along the motorboat's sides to finally bring up her nose under the quarter with an insistent, thump! thump! trying to the temper as well as the smoothness of the paint. Every boatman has no doubt been there, and climbed out of his bunk to ship the painter first to one part of the boat then to another, only to hear the dismal thump continue as soon as he turns in. Now in fairly large sailing craft, the bowsprit makes a tip-top riding boom, but in small motorboats, there is a simple trick well worth trying. Drop an iron pail with a lanyard attached to its bail over the tender's stern. The bucket will fill and offer sufficient resistance to the tide, so that the dinkey will not be influenced by the wind but ride to the tide only and thus keep clear and well astern of the yacht.

Life in an Eastern Port

(*Continued from page 20*)

loosing and setting sail. As we worked high aloft, casting gaskets adrift and overhauling buntlines, with the picturesque Victoria Island becoming gradually smaller, as it dropped further and further astern, one wondered what was in store for us during the next two or three months, which would elapse before we again sailed into port, this time far to the South in a strange land, which many of us were to see for the first time.

Navigation for Amateur Skippers

(*Continued from page 27*)

quantities, the other two can be found by inspection. A few examples will make this clear.

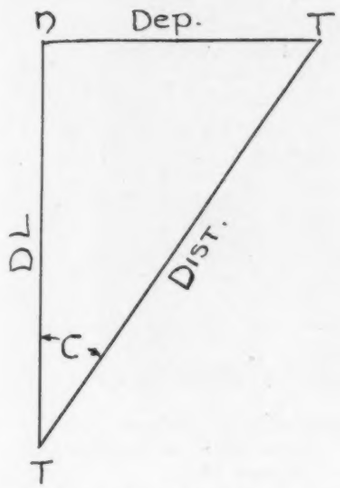

FIG. 17. PLANESAILING

Example 1. A ship sails SSW, 250 miles. Required the difference of latitude and departure.

Enter table 1, at course SSW. It occurs on top of page so take names of columns from top. Under the column marked Dist. look for 250. On the same line is the solution under the columns marked Lat. and Dep.

Diff. of Lat.=231 miles=231′=3°—51′ S.
Dep. 95.7 miles W.

Example 2. A vessel sails S80 E, 190 miles. Find the difference of latitude and departure.

All courses are figured from North as zero right around the compass in a clockwise direction. Therefore S80 E is the equivalent of N100 E, or course 100. Enter Table 2 at the course 100. This occurs at the *bottom* of the page so take all column names from the *bottom*. Opposite Dist. 190 we find Dep=187.1, Lat=33, therefore

DL=33′S.
Dep=187.1 miles E.

Example 3. A vessel has sailed 115 miles to the North and 155 miles to the West. Required the Course and Distance sailed (using table 1).

In this case LatN=115 and Dep=155 W. Enter table 1 and find a course where 115 and 155 are found abreast each other in the columns marked Lat and Dep respectively. This occurs most nearly at 4¾ points; the angle is taken at the bottom because the proper names of the columns occur there. Since the Lat is N and the Dep is W the

Course=NW¾W. The distance is found on the same line as 115 and 155, and in this case is 193 miles.

Example 4. A vessel sails 67 miles to the North and 52 miles to the West. Required the Course and Distance, using table 2.

In this case Lat=67N and Dep=52W.

Enter table 2 and find the page where the known quantities occur on the same line. This occurs most nearly under 32, and the distance is 79. Since the proper column names occur at the top of the page, the result is

Course=N32°W=328°.
Distance =79 mile.

(*To be Continued*)

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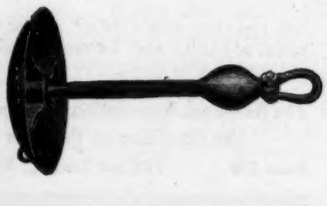

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Little Man in Blue Suit Gets in Aircraft Plant Without Pass

I WANT to see Mr. Mingle," said a little man in a blue serge sack suit and a white Panama one day early this month, to a big soldier guarding the entrance to the Standard Aircraft Corporation's plant. The soldier referred the little man to the information desk, where he got a blank form to fill out. When that had been done the form read this way:

Name:—Mr. Newton D. Baker.
To see:—Mr. Mingle.
Re:—Secretary of War.

Mr. Mingle, President of the Corporation, was never seen sooner. Returning from New York to Washington, the Secretary of War took a notion to drop in and see an aircraft factory for the first time in his life. He spends a billion a year on aircraft, but never saw where the money goes before. He saw it going fast enough as he trudged through some miles of factory aisles and rooms, where nearly 5,000 men and women are working on airplanes for the army and flying boats for the navy.

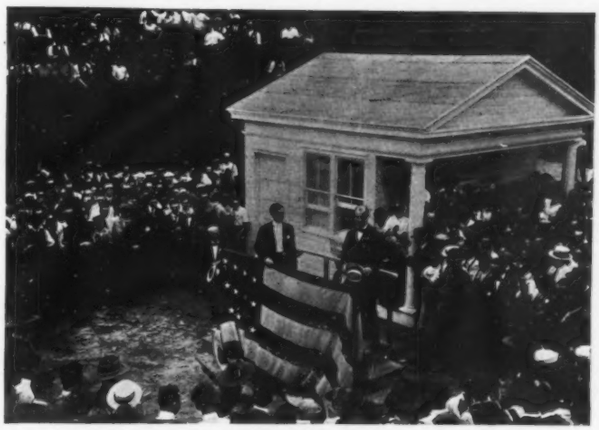
Although the Secretary was without a pass from the signal corps he was permitted to go everywhere in the plant, even into those holies of holies, the engineering laboratory and a certain other department, where a special form of entertainment for the German is being manufactured. This too, notwithstanding conspicuous notices on the walls that no one claiming to be an officer or a representative of the War Department would be admitted without a special pass with "an inexpensive photograph" attached thereon.

Some thirty executives of the factory were called into President Mingle's office to meet the Secretary and he got a line on industrial mobilization when he found on aerial escort of 100 'planes, flying in perfect formation and alignment. The sight reminded him of how important and responsible was the work of the builders of aircraft and it had therefore greatly pleased him to observe how keen and careful all the Standard workers were.

questioning them that they were all newcomers to Elizabeth.

Moved by what he saw in one of the secret places, the Secretary told them that now he could indeed assure General Pershing that he was going to be emphatically backed up in the air. He promised the men great "doings" when their handiwork was ready for business.

Everybody else in the big works then wanted to see and hear the Secretary, so an impromptu outdoor meeting was arranged and messengers sped through the shops to summon the workers. When they had assembled Mr. Baker told them something of his experiences at the front in France and how when he arrived at an American aviation field he was welcomed by an



Secretary of War, Baker speaking before the employees of the Standard Aircraft Corporation, Elizabeth, New Jersey

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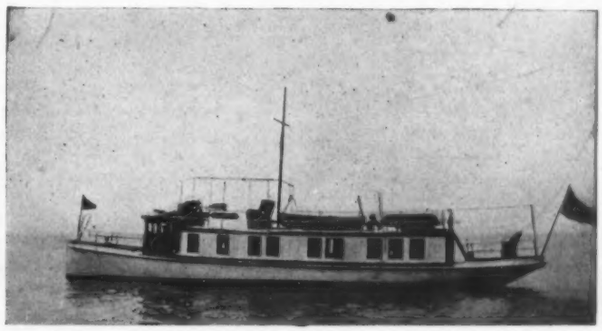

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